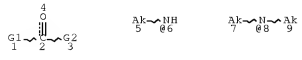
```
=> d que
L1             1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  US20050095314/PN
L7               STR
```



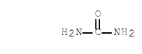

```
VAR G1=NH2/6
VAR G2=NH2/6/8
NODE ATTRIBUTES:
CONNECT IS E1  RC AT   5
CONNECT IS E1  RC AT   7
CONNECT IS E1  RC AT   9
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   9

STEREO ATTRIBUTES: NONE
L12              SCR 2043 OR 1918 OR 1995 OR 2016 OR 2021 OR 2026
L14              SCR 1838
L16         2207 SEA FILE=REGISTRY SSS FUL L7 NOT (L12 OR L14)
L18        95805 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16
L22          653 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18(L)FFD/RL
L23           12 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22(L)FISH?
L24           41 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND FISH?
L25           39 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18(L)(FEED? OR DIET? OR
                 FOOD?)(3A)(FISH? OR  (MARINE? OR AQUATIC OR OCEAN?)(2A)
                 SPECIES OR CRUSTACEAN?)
L26           75 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L23 OR L24 OR L25)
L27           49 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L26 AND FFD/RL
L28            1 SEA FILE=REGISTRY ABB=ON  PLU=ON  57-13-6/RN
L29         2206 SEA FILE=REGISTRY ABB=ON  PLU=ON  L16 NOT L28
L33         8406 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29
L34            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 AND (FEED? OR DIET?
                 OR FOOD?)(3A)(FISH? OR  (MARINE? OR AQUATIC OR OCEAN?)(2A)
                 SPECIES OR CRUSTACEAN?)
L35           51 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 AND FFD/RL
L36            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND FISH?
L37            0 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND L1
L38           37 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND (FEED? OR DIET?
                 OR FOOD?)
L39            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 AND (WATER? SEA? OR
                 RIVER? OR LAKE? OR OCEAN? OR MARINE? OR AQUATIC?)
L40       104865 SEA FILE=HCAPLUS ABB=ON  PLU=ON  FEED+PFT,NT/CT
L41            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 AND L40
L42            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 AND ANIMAL FEED?
L43           58 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L27 OR L34 OR L36 OR L37
                 OR L39 OR L41 OR L42
L44           36 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L43 AND (1840-2002)/PRY,AY
                 ,PY
```

=> d 144 1-36 ibib ed abs hitstr hitind

L44 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1150425 HCAPLUS Full-text
DOCUMENT NUMBER: 143:405077
TITLE: Method for production of fish waste-containing mixed feed by wet granulation process
INVENTOR(S): Mukatova, M. D.; Kirichko, N. A.
PATENT ASSIGNEE(S): Mukatova Marfuga Dyusembaevna, Russia
SOURCE: Russ., 4 pp.
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2262862	C2	20051027	RU 2002-121866 <--	20020807
PRIORITY APPLN. INFO.:			RU 2002-121866 <--	20020807

ED Entered STN: 27 Oct 2005
AB The method involves grinding and cooking fish wastes, pressing while introducing 2-3% urea, mixing, performing indirect steam cooking, centrifuging, mixing with dried plant components, providing thermal processing, cooling, introducing beer yeast, granulating and drying. The disclosed process reduces heat and power consumption and consumption of crude materials per unit of ready product.
IT 57-13-6, Urea, biological studies
(method for production of fish waste-containing mixed feed by wet granulation process)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



IC ICM A23K001-10
ICS A23K001-20
CC 17-12 (Food and Feed Chemistry)
ST feed manuf wet granulation fish waste plant urea yeast
IT Oryza sativa
(flour and meal; method for production of fish waste-containing mixed feed by wet granulation process)
IT Wastes
(food-processing, fish; method for production of fish waste-containing mixed feed by wet granulation process)
IT Brewers' yeast
Centrifugation
Embryophyta
Feed
Food processing
Plants
Vegetable

Wheat bran
(method for production of fish waste-containing mixed feed by wet granulation process)
IT Fats and Glyceridic oils, biological studies
Mineral elements, biological studies
(method for production of fish waste-containing mixed feed by wet granulation process)
IT Crustacea
Fish
(processing wastes; method for production of fish waste-containing mixed feed by wet granulation process)
IT Flours and Meals
(rice; method for production of fish waste-containing mixed feed by wet granulation process)
IT Cooking
(steaming; method for production of fish waste-containing mixed feed by wet granulation process)
IT Algae
Milling (size reduction)
(wastes; method for production of fish waste-containing mixed feed by wet granulation process)
IT Granulation
(wet; method for production of fish waste-containing mixed feed by wet granulation process)
IT 57-13-6, Urea, biological studies 1318-00-9, Vermiculite
(method for production of fish waste-containing mixed feed by wet granulation process)

L44 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:441413 HCAPLUS Full-text
DOCUMENT NUMBER: 143:6757
TITLE: Environmental-protection aquatic product fodder adhesive and production process thereof
INVENTOR(S): Zhang, Yanfeng; Li, Shoujun
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1507791	A	20040630	CN 2002-135877 <--	20021213
PRIORITY APPLN. INFO.:			CN 2002-135877 <--	20021213

ED Entered STN: 25 May 2005
AB The present invention relates to an environment-protecting aquatic feed adhesive, its raw material includes urea, formaldehyde and soybean powder. By mass concentration said invention uses 37% of formaldehyde solution, the weight mixing ratio of formaldehyde and urea is 1:1.2-1.75, and the added quantity of soybean powder is 10-20% of total weight of dihydroxymethyl urea glue formed by means of polycondensation reaction of urea and formaldehyde, and the viscosity of dihydroxymethyl urea glue is 100-400s. Said invented aquatic feed has no formaldehyde pollution after it is put into water, and can ensure the required time for retaining said feed in water, said feed can be swollen, but can not be dispersed.

IT 25155-29-7, Bis(hydroxymethyl) urea
(environmental-protection aquatic product fodder adhesive and production process thereof)
RN 25155-29-7 HCAPLUS
CN Urea, bis(hydroxymethyl)- (CA INDEX NAME)

IC ICM A23K001-18
CC 17-12 (Food and Feed Chemistry)
ST aquaculture feed adhesive urea formaldehyde soybean powder
IT Adhesives
Aquaculture
Feed
Soybean meal
Viscosity
(environmental-protection aquatic product fodder adhesive and production process thereof)
IT 50-00-0, Formaldehyde, biological studies 57-13-6, Urea, biological studies 25155-29-7, Bis(hydroxymethyl) urea
(environmental-protection aquatic product fodder adhesive and production process thereof)

L44 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:948021 HCAPLUS Full-text
DOCUMENT NUMBER: 142:217988
TITLE: Method for producing purified fish oil
INVENTOR(S): Lee, Ju Yeon; Lee, Sang Hak
PATENT ASSIGNEE(S): Dongwoo Industrial Co., Ltd., S. Korea
SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Korean
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2002051903	A	20020629	KR 2002-25073 <--	20020507
PRIORITY APPLN. INFO.:			KR 2002-25073 <--	20020507

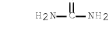
ED Entered STN: 09 Nov 2004
AB A method for producing purified fish oil is provided to completely remove fish smell and store it for a long time. The method comprises the steps of: mixing water and MSG byproducts with fish oil; heating the mixture in a stirrer with agitation; adding urea into the mixture and fermenting it; steaming the fermented mixture at high temperature and centrifuging it to sep. the fish oil from the water and phospholipid; measuring the acidity of the separated fish oil and neutralizing it with NaOH; washing the fish oil with hot water and

drying it under vacuum; adding 150 to 200 mesh earthworm excretion powder into the dried fish oil; heat-adsorbing the fish oil to the earthworm excretion powder in a stirrer; reacting them at 30° or more for 30 min to 1 h; adding acidic white clay into the fish oil to adsorb pigments and filtering the fish oil; and removing the odor of the fish oil using the water vapor under vacuum, followed by cooling the fish oil, and filtering it.

IT 57-13-6, Urea, biological studies
(fish odor removal in production of purified fish oil)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



IC ICM A23L001-39

CC 17-9 (Food and Feed Chemistry)

ST fish oil phospholipid odor monosodium glutamate urea

IT Earthworm
(excretion of; fish odor removal in production of purified fish oil)

IT Acidity
Odor and Odorous substances
Pigments, biological
(fish odor removal in production of purified fish oil)

IT Phospholipids, biological studies
(fish odor removal in production of purified fish oil)

IT Kaolin, uses
(fish odor removal in production of purified fish oil)

IT Fats and Glyceridic oils, biological studies
(fish; fish odor removal in production of purified fish oil)

IT Excretions
(from earthworm; fish odor removal in production of purified fish oil)

IT 57-13-6, Urea, biological studies 142-47-2, MSG
(fish odor removal in production of purified fish oil)

L44 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:450469 HCAPLUS Full-text

DOCUMENT NUMBER: 141:6176

TITLE: Silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds

INVENTOR(S): Heindl, Frank; Drexel, Claus-peter; Aul, Christina

PATENT ASSIGNEE(S): Degussa Ag, Germany

SOURCE: Ger. Offen., 5 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10253193	A1	20040603	DE 2002-10253193 <--	20021115
PRIORITY APPLN. INFO.:			DE 2002-10253193 <--	20021115

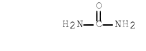
ED Entered STN: 04 Jun 2004

AB The invention concerns the coating of silicic acids, silicagels or silicates with approved edible waxes, oils or fats for use as food or animal feed additives.

IT 57-13-6, Urea, biological studies
(silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



IC ICM C01B033-12
ICS C01B033-20

CC 17-6 (Food and Feed Chemistry)

IT Fish
(feed; silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

IT Feed
(fish; silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

IT 50-70-4, E 420, biological studies 50-81-7, E 300, biological studies 56-86-0, E 620, biological studies 57-13-6, Urea, biological studies 57-50-1, Sucrose, biological studies 59-02-9, E 307 63-68-3, L-Methionine, biological studies 69-65-8, E 421 77-92-9, E 330, biological studies 85-32-5, E 626 87-69-4, E 334, biological studies 89-65-6, E 315 118-71-8, E 636 121-79-9, E 310 126-13-6, E 444 134-03-2, E 301 137-66-6, Ascorbyl palmitate 142-47-2, E 621 458-37-7, E 100 544-17-2, E 328 915-67-3, E 123 994-36-5, E 331 1034-01-1, E 311 1260-17-9, E 120 1338-39-2, E 493 1338-41-6, E 491 1338-43-8, E 494 1343-98-2, Silicic acid 1393-63-1, E 160b 1934-21-0, E 102 2611-82-7, E 124 2783-94-0, E 110 3567-69-9, E 122 5793-94-2, E 482 5905-52-2, E 585 7558-63-6, E 624 7647-14-5, Sodium chloride, biological studies 7664-38-2, E 338, biological studies 7758-98-7, Copper sulfate, biological studies 7778-49-6, E 332 7782-63-0, Iron sulfate heptahydrate 8000-51-9, E 160a 8004-92-0, E 104 9000-01-5, E 414 9000-07-1, E 407 9000-30-0, E 412 9000-36-6, E 416 9000-40-2, E 410 9000-65-1, E 413 9002-18-0, E 406 9004-32-4, E 466 9004-59-5, E 465 9004-64-2, E 463 9004-65-3, E 464 9004-67-5, E 461 9005-25-8, Starch, biological studies 9005-36-1, E 402 9005-38-3, E 401 9005-64-5, E 432 11138-66-2, E 415 16423-68-0, E 127 17977-66-1, E 483 18543-68-5, E 625 19473-49-5, E 622 21275-71-8, E 351 25383-99-7, E 481 26266-57-9, E 495 26658-19-5, E 492 29894-35-7, E 476 39300-88-4, E 417 62524-63-4, E 623 71010-52-1, E 418 114355-28-1, E 160c 283596-77-0, E 471 439687-68-0, E 473 503590-90-7, E 475 503591-10-4, E 477 697248-17-2, E 474 697248-18-3, E 479b 697248-25-2, E 906 697248-27-4, E 912 697248-38-7, E 914

697248-43-4, E 915 697248-49-0, E 160 (carotinoid) 697248-54-7, E 440b
(silicic acid, silica gels or silicates coated with wax, oil or fats for use in foods and animal feeds)

L44 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:220125 HCAPLUS Full-text
DOCUMENT NUMBER: 140:252766
TITLE: Solid feed for big fish
INVENTOR(S): Yoshitomi, Bunji; Obama, Minako; Ueda, Takashi; Konoo, Shigeki
PATENT ASSIGNEE(S): Nippon Suisan Kaisha, Ltd., Japan
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004021800	A1	20040318	WO 2003-JP11155 <--	20030901
W: AU, CA, CN, HR, KR, MX, NO, NZ, US RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
JP 2004097064	A	20040402	JP 2002-262084 <--	20020906
JP 3979591	B2	20070919		
AU 2003261870	A1	20040329	AU 2003-261870 <--	20030901
EP 1566106	A1	20050824	EP 2003-794162 <--	20030901
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
MX 2005PA02328	A	20050818	MX 2005-PA2328 <--	20050228
PRIORITY APPLN. INFO.:			JP 2002-262084 A <--	20020906
			WO 2003-JP11155 W	20030901

ED Entered STN: 19 Mar 2004
AB The solid feed is prepared from solid material which is prepared by extrusion by mixing with heat-labile components using heat-melting binders such as starch. The solid feed is useful for aquaculture of big fish such as tuna fish.
IT 57-13-6, Urea, biological studies
(solid feed for big fish)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

IC ICM A23K001-18
ICS A23K001-20

CC 17-12 (Food and Feed Chemistry)
ST fish feed binder extrusion aquaculture mariculture
IT Fish
(big; solid feed for big fish)
IT Drug delivery systems
(capsules; solid feed for big fish)
IT Sausage casings
(edible; solid feed for big fish)
IT Aquaculture
(mariculture; solid feed for big fish)
IT Alcohols, biological studies
(polyhydric; solid feed for big fish)
IT Extrusion, nonbiological
Extrusion apparatus
Feed
Grains (particles)
Oncorhynchus mykiss
Plasticizers
Tablets
Thermal stability
Thunnus
(solid feed for big fish)
IT Carbohydrates, biological studies
(solid feed for big fish)
IT 57-13-6, Urea, biological studies 9005-25-8, Starch, biological studies
(solid feed for big fish)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:737497 HCAPLUS Full-text
DOCUMENT NUMBER: 139:245088
TITLE: Feed for aquatic species and crustaceans
INVENTOR(S): Breivik, Harald; Kulas, Elin; Aasbo, Kari; Aanesen, Berit Annie; Sanna, Lola Irene
PATENT ASSIGNEE(S): Norsk Hydro Asa, Norway
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

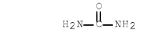
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003075677	A1	20030918	WO 2003-NO84 <--	20030311

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

NO 2002001265	A	20030915	NO 2002-1265 <--	20020314
NO 323683	B1	20070625		
CA 2478821	A1	20030918	CA 2003-2478821 <--	20030311
AU 2003212716	A1	20030922	AU 2003-212716 <--	20030311
EP 1489919	A1	20041229	EP 2003-708743 <--	20030311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005095314	A1	20050505	US 2004-507143 <--	20040909

PRIORITY APPLN. INFO.:	NO 2002-1265 <--	A	20020314
	WO 2003-NO84	W	20030311

OTHER SOURCE(S): MARPAT 139:245088
ED Entered STN: 19 Sep 2003
AB Feed for aquatic species and crustaceans, in particular marine species and fry is presented. The feed described comprises proteins, lipids and addnl., optional components, and is characterized in that the lipids are one or more marine oils and/or vegetable oils treated by urea and/or other amines or amides, to prevent degradation due to oxidation (oxidative stress).
IT 57-13-6, Urea, biological studies
(feed for aquatic species and crustaceans)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



IC ICM A23K001-00
ICS C11B005-00; A23D009-06
CC 17-12 (Food and Feed Chemistry)
ST fish oil vegetable oil feed marine fish crustacean
IT Fats and Glyceridic oils, biological studies
(fish, n-3 fatty acid-high; feed for aquatic species and crustaceans)
IT Fish
(marine; feed for aquatic species and crustaceans)
IT 57-13-6, Urea, biological studies
(feed for aquatic species and crustaceans)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:396644 HCAPLUS Full-text
DOCUMENT NUMBER: 138:384523
TITLE: Treatment of vegetable oils or animal fats with sulfur or nitrogen donor compounds for animal food flavorings
INVENTOR(S): Nelles, Lynn P.; Sucan, Mathias; Trivedi,

Nayankumar B.
PATENT ASSIGNEE(S): Applied Food Biotechnology, Inc., USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003041514	A1	20030522	WO 2002-US36200 <--	20021112
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003104102	A1	20030605	US 2001-993048 <--	20011113
US 7329426	B2	20080212		
AU 2002343659	A1	20030526	AU 2002-343659 <--	20021112
BR 2002014124	A	20041013	BR 2002-14124 <--	20021112
PRIORITY APPLN. INFO.:			US 2001-993048 A <--	20011113
			WO 2002-US36200 W <--	20021112

ED Entered STN: 23 May 2003

AB Oils or fats from plants and/or animals are chemical treated to create flavor/palatability enhancer (FPE) products for use with animal foods, such as dog or cat food. This method involves mixing triglycerides (from the oil or fat) with sulfur and/or nitrogen donor compds., such as sodium sulfide. The mixture is cooked at a temperature close to boiling, or higher if pressure-cooking is used, for a period of time sufficient to break down large nos. of triglyceride mols. into their constituent fatty acids and other fragments. Under suitable cooking conditions, the organic fragments will react with sulfur and/or nitrogen atoms from the donor compound(s), to form relatively small organic mols. containing sulfur and/or nitrogen.

IT 57-13-6, Urea, biological studies
(treatment of vegetable oils or animal fats with sulfur or nitrogen donor compds. for animal food flavorings)

RN 57-13-6 HCAPLUS

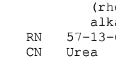
CN Urea (CA INDEX NAME)

IC ICM A23L001-22

CC 17-12 (Food and Feed Chemistry)

IT Fats and Glyceridic oils, biological studies
(fish; treatment of vegetable oils or animal fats with sulfur or nitrogen donor compds. for animal food flavorings)
IT 57-13-6, Urea, biological studies 74-79-3, L-Arginine, biological studies 1336-21-6, Ammonium hydroxide 7704-34-9, Sulfur, biological studies
(treatment of vegetable oils or animal fats with sulfur or nitrogen donor compds. for animal food flavorings)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:740544 HCAPLUS Full-text
DOCUMENT NUMBER: 137:351820
TITLE: Rheological properties of heat-induced gels of surimi from acid and alkali process
AUTHOR(S): Choi, Yeung Joon; Park, Joo Dong; Kim, Jin-Soo; Cho, Young-Je; Park, Jae W.
CORPORATE SOURCE: Division of Marine Bioscience/Institute of Marine Industry, Gyeongsang National University, Tongyeong, 650-160, S. Korea
SOURCE: Han'guk Susan Hakhoechi (2002), 35(4), 309-314
CODEN: HSHKAW; ISSN: 0374-8111
PUBLISHER: Korean Fisheries Society
DOCUMENT TYPE: Journal
LANGUAGE: Korean
ED Entered STN: 30 Sep 2002
AB Rheol. properties of surimi gel from white fishes by acid (acid surimi) and alkali (alkali surimi) processes and effect of chems. on gelation were investigated by punch and dynamic tests. The breaking force and deformation values were less in heat-induced acid surimi than in conventional alkali surimi, and whiteness in acid surimi was greatly decreased. Gel point decreased in acid surimi but increased in alkali surimi with increasing moisture content in the range of 80 to 85%. Storage modulus was highest at pH 6.8 in acid surimi, but in alkali surimi, it showed high values at neutral and slightly alkali pHs. Propylene glycol increased storage modulus at 20.apprx.50°, but urea and 2-mercaptoethanol suppressed it. Potassium bromide improved storage modulus at 20.apprx.80°. The results suggest that the alkali process can be used for making surimi instead of the conventional method.
IT 57-13-6, Urea, biological studies
(rheol. properties of heat-induced gels of surimi from acid and alkali process)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



CC 17-7 (Food and Feed Chemistry)
IT Fish
Food gelling
Food rheology
Merluccius productus
Pennahia argentata

Protonibea diacanthus
(rheol. properties of heat-induced gels of surimi from acid and alkali process)

IT Fish
(surimi; rheol. properties of heat-induced gels of surimi from acid and alkali process)

IT 57-13-6, Urea, biological studies 57-55-6, Propylene glycol, biological studies 60-24-2, 2-Mercaptoethanol 7758-02-3, Potassium bromide, biological studies
(rheol. properties of heat-induced gels of surimi from acid and alkali process)

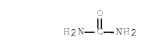
L44 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:668616 HCAPLUS Full-text
DOCUMENT NUMBER: 137:337213
TITLE: Protective effect of menhaden oil on renal necrosis occurring in weanling rats fed a methyl-deficient diet
AUTHOR(S): Courreges, Maria C.; Caruso, Carla; Klein, Jochen; Monserrat, Alberto J.
CORPORATE SOURCE: Facultad de Medicina, Departamento de Patologia, Patologia Experimental, Universidad de Buenos Aires, Buenos Aires, 1114, Argent.
SOURCE: Nutrition Research (New York, NY, United States) (2002), 22(9), 1077-1089
CODEN: NTRSDC; ISSN: 0271-5317
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 05 Sep 2002
AB Weanling rats fed lipotropic-deficient diets (LDD) may develop acute renal failure with morphol. features that vary from focal tubular necrosis to widespread cortical necrosis and eventually reparative changes. The type of lipid in the diet influences the development of renal necrosis. The effects of dietary menhaden oil on the development of acute renal failure induced in weanling rats by methyl-deficient diet were examined In Experiment I, 40 weanling Sprague-Dawley male rats were fed LDD with hydrogenated vegetable oil and corn oil as lipids (group 1), LDD with menhaden oil as lipid (group 2), and group 3 and 4 similar to groups 1 and 2 plus 0.35% choline chloride. The rats were fed ad libitum until they died; the surviving animals were killed on day 21. Mortality in the 4 groups was 60, 0, 0, and 10%, resp. Rats from groups 2, 3, and 4 did not show any renal damage. The dead rats from group 1 had tubular or cortical necrosis and those killed on the 21st day had reparative changes. Experiment II was similar to experiment I, except that 45 weanling Wistar male rats were used and were killed on the 7th day. All rats from group 1 had renal necrosis and no renal damage was found in rats from groups 2, 3, and 4. Urea and creatinine level changes corroborated the renal changes. Thus, menhaden oil has protective effects for renal necrosis induced by methyl-deficient diets in weanling rats.
IT 57-13-6, Urea, biological studies
(dietary menhaden fish oil protective effect on renal necrosis in weanling rats fed methyl-deficient diet)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

CC 18-5 (Animal Nutrition)
Section cross-reference(s): 14
IT 57-13-6, Urea, biological studies 60-27-5, Creatinine
(dietary menhaden fish oil protective effect on
renal necrosis in weanling rats fed methyl-deficient diet)
REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:591669 HCAPLUS Full-text
DOCUMENT NUMBER: 137:154384
TITLE: Symbiotic regenerative compositions containing microorganisms
INVENTOR(S): Schuer, Joerg-Peter
PATENT ASSIGNEE(S): Germany
SOURCE: Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1228769	A1	20020807	EP 2001-102384 <--	20010202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
CA 2437530	A1	20020906	CA 2002-2437530 <--	20020201
WO 2002067986	A2	20020906	WO 2002-EP1056 <--	20020201
WO 2002067986	A3	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002244694	A1	20020912	AU 2002-244694 <--	20020201
EP 1390071	A2	20040225	EP 2002-712882 <--	20020201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2005503332	T	20050203	JP 2002-567351 <--	20020201
US 2004076614	A1	20040422	US 2003-467040 <--	20031204
PRIORITY APPLN. INFO.:			EP 2001-102384 <--	A 20010202
			WO 2002-EP1056 <--	W 20020201

ED Entered STN: 09 Aug 2002
AB The invention concerns regenerative drugs, dietary supplements, feed additives that contain microorganisms and modulating substances, e.g. enzymes, GRAS (Generally Recognized As Safe) aromas, plant exts. Further the compns. contain vitamins, minerals, growth promoters, carrier substances, etc. Microorganisms are a-pathogenic, pathogenic or facultative pathogenic,.
IT 57-13-6, Urea, biological studies
(symbiotic regenerative compns. containing microorganisms)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



IC ICM A61K045-06
ICS A61P043-00
CC 18-6 (Animal Nutrition)
Section cross-reference(s): 1, 17, 63
IT Achillea
Actinidia chinensis
Aesculus
Alcaligenes faecalis
Algae
Allergy inhibitors
Allium cepa
Allium sativum
Aloe (genus)
Althaea officinalis
Anethum graveolens
Animals
Anti-infective agents
Antioxidants
Antitumor agents
Arctium
Arnica
Artemisia dracunculus
Avena sativa
Bacillus subtilis
Beeswax
Bifidobacterium bifidum
Blood
Bone
Borrelia buccalis
Brassica
Calamus (palm genus)
Camellia
Camellia sinensis
Cananga odorata
Carica papaya
Carum carvi
Caviar
Centaurea cyanus
Centaurium
Chelidonium majus
Chrysanthemum
Cinchona

Cinnamon (horticultural common name)
Citrobacter
Citrullus lanatus
Citrus aurantifolia
Citrus aurantium
Citrus limon
Citrus paradisi
Citrus reticulata
Citrus sinensis
Cladosporium
Cocos nucifera
Coffea
Coral
Coriandrum sativum
Corynebacterium pseudodiphtheriticum
Corynebacterium xerosis
Crataegus
Croton eluteria
Crustacea
Cucumis melo
Cucumis sativus
Cupressus
Cymbopogon
Dactylopius coccus
Daucus carota
Derris (genus)
Dietary supplements
Digestive tract
Echinacea
Egg, poultry
Elettaria cardamomum
Emulsifying agents
Equisetum
Eucalyptus
Eucalyptus citriodora
Feather
Feed additives
  Fish
Flavor
Foeniculum vulgare
Fungicides
Fur
Gaffkya tetragena
Gentiana
Geotrichum
Ginkgo
Glycine max
Glycyrrhiza
Hair
Hamamelis
Hay
Hedera
Helianthus annuus
Hibiscus
Honey
Human
Humulus
Hypericum
Immunostimulants
Immunosuppressants

Immunotherapy
Ivory
Juglans
Juniperus
Lactobacillus acidophilus
Lactobacillus casei
Lactobacillus delbrueckii bulgaricus
Lactobacillus fermentum
Lamium
Laurus nobilis
Lavandula
Lawsonia inermis
Leather
Liquidambar
Malus pumila
Malva
Mangifera indica
Marigold
Matricaria recutita
Meat
Melissa
Mentha aquatica
Mentha piperita
Menyanthes trifoliata
Milk
Moraxella catarrhalis
Moschus
Mucor
Musa
Myristica
Neisseria flava
Neisseria flavescens
Neisseria perflava
Neisseria sicca
Neisseria subflava
Nut (seed)
Odor and Odorous substances
Orange
Origanum
Origanum vulgare
Orthosiphon
Oryza sativa
Panax
Passiflora edulis
Paullinia cupana
Pearl
Persea
Peumus boldus
Phocidae
Phosphors
Picea
Pimenta dioica
Pimpinella anisum
Pinus
Placenta
Plantago major
Pollen
Porifera
Poultry
Preservatives

Primula veris
Propolis
Prunus amygdalus
Prunus persica
Quassia
Rheum
Rhodotorula rubra
Rosmarinus officinalis
Royal jelly
Ruscus aculeatus
Saccharomyces cerevisiae
Salvia
Sarcina
Satureja
Scorzonera hispanica
Serratia marcescens
Sesamum indicum
Silk
Simmondsia chinensis
Solanum tuberosum
Solvents
Staphylococcus epidermidis
Streptococcus
Styrax
Symphytum officinale
Syzygium aromaticum
Taraxacum officinale
Taxus
Theobroma cacao
Theobroma grandiflorum
Thymus (plant)
Tilia
Torulopsis
Trifolium
Trigonella foenum-graecum
Tussilago farfara
Urtica
Valeriana
Veillonella parvula
Veratrum viride
Viscaceae
Wheat bran
Whey
Yeast
Zingiber officinale
(symbiotic regenerative compns. containing microorganisms)

IT 50-14-6, Calciferol 50-21-5, Lactic acid, biological studies 50-81-7, L-Ascorbic acid, biological studies 52-90-4, L-Cysteine, biological studies 56-81-5, Glycerin, biological studies 56-87-1, L-Lysine, biological studies 57-11-4D, Stearic acid, derivs. 57-13-6, Urea, biological studies 57-55-6, Propyleneglycol, biological studies 57-83-0, Progesterone, biological studies 57-88-5, Cholesterol, biological studies 58-22-0, Testosterone 59-02-9, α-Tocopherol 59-43-8, Thiamin, biological studies 59-67-6, Nicotinic acid, biological studies 62-54-4, Calciumacetate 64-17-5, Ethylalcohol, biological studies 64-18-6, Formic acid, biological studies 64-19-7, Acetic acid, biological studies 66-25-1, Hexylaldehyde 67-63-0, Isopropanol, biological studies 69-65-8, Mannite 70-47-3, L-Asparagine, biological studies 71-23-8, Propylalcohol, biological studies 71-36-3, n-Butylalcohol,

biological studies 71-41-0, n-Amyl alcohol, biological studies 75-07-0, Acetaldehyde, biological studies 76-22-2, Camphor 77-92-9, Citric acid, biological studies 78-70-6, Linalool 78-83-1, Iso Butylalcohol, biological studies 78-84-2 79-83-4, Pantothenic acid 83-79-4, Rotenone 83-88-5, Riboflavin, biological studies 87-44-5, β-Caryophyllen 87-66-1, Pyrogallol 87-89-8, Inositol 89-83-8, Thymol 90-64-2, Mandelic acid 93-15-2, Methyleugenol 93-28-7, Eugenolacetate 94-59-7, Safrol 94-86-0, Propenylguaethol 97-53-0, Eugenol 97-54-1, Isoeugenol 98-01-1, Furfural, biological studies 98-85-1, α-Methylbenzylalcohol 100-51-6, Benzylalcohol, biological studies 100-52-7, Benzaldehyde, biological studies 100-66-3, Anisol, biological studies 102-16-9, Benzylphenylacetate 102-76-1, Triacetine 103-09-3, Octylacetate 103-45-7 103-54-8, Cinnamylacetate 103-82-2, Phenylacetic acid, biological studies 104-46-1, Anethol 104-53-0, Hydrocinnamic aldehyde 104-54-1, Cinnamic alcohol 104-55-2, Cinnamic aldehyde 105-13-5, Anise alcohol 105-82-8, Acetaldehyde dipropylacetal 105-87-3, Geranylacetate 106-22-9, Citronellol 106-23-0, Citronellal 106-24-1, Geraniol 108-46-3, Resorcin, biological studies 108-73-6, Phloroglucin 108-95-2, Phenol, biological studies 109-52-4, Valeric acid, biological studies 110-17-8, Fumaric acid, biological studies 110-82-7, Cyclohexane, biological studies 111-02-4, Squalene 111-70-6, Heptylalcohol 111-71-7, Heptylaldehyde 111-87-5, Octylalcohol, biological studies 112-05-0, Pelargonic acid 112-30-1, n-Decylalcohol 112-31-2, Decanal 112-43-6, 10-Undecen-1-ol 112-53-8, Laurylalcohol 112-54-9, Laurylaldehyde 113-24-6, Sodium pyruvate 115-95-7, Linalylacetate 120-57-0, Heliotropin 121-32-4, Ethylvanillin 121-33-5, Vanillin 122-03-2, Cuminaldehyde 122-59-8, Phenoxyacetic acid 122-72-5, Hydrocinnamylacetate 122-78-1, Phenylacetaldehyde 122-87-2, Glycin 123-31-9, Hydroquinone, biological studies 123-38-6, Propionaldehyde, biological studies 123-51-3, Iso-Amyl alcohol 123-86-4, n-Butylacetate 123-92-2, Iso-Amylacetate 124-04-9, Hexanedioic acid, biological studies 124-13-0, Octylaldehyde 124-19-6, Nonylaldehyde 125-46-2, Usnic acid 127-08-2, Potassium acetate 127-09-3, Sodium acetate 127-40-2, Lutein 137-08-6, Calciumpantothenate 137-66-6, Ascorbic palmitate 138-86-3, Limonen 140-11-4, Benzylacetate 140-67-0, Methylchavicol 141-78-6, Ethylacetate, biological studies 142-62-1, Capronic acid, biological studies 142-92-7, Hexylacetate 143-08-8, Nonylalcohol 147-85-3, L-Proline, biological studies 148-03-8, β-Tocopherol 149-91-7D, Gallic acid, derivs. 150-84-5, Citronellylacetate 153-18-4, Rutin 154-23-4, Catechin 303-98-0, Coenzyme Q10 321-30-2, Adenine sulfate 331-39-5, Caffeic acid 367-51-1, Sodium thioglycolate 432-70-2, α-Carotene 499-12-7, Aconitic acid 499-75-2, Carvacrol 501-52-0, Hydrocinnamic acid 503-74-2, Iso-Valeric acid 507-70-0, Borneol 513-86-0, Acetoin 514-78-3, Canthaxanthine 515-69-5, α-Bisabolol 526-83-0, Tartaric acid 536-60-7, Cuminylalcohol 541-15-1, L-Carnitine 621-82-9, Cinnamic acid, biological studies 871-22-7, Acetaldehyde dibutyl acetal 1260-17-9, Carminic acid 1335-39-3, Hexenal 1390-65-4, Carmine 1393-63-1, Annatto 1398-61-4, Chitin 1708-35-6 2111-75-3, Perillaaldehyde 2216-51-5 2568-25-4, Benzaldehyde propylene glycolacetal 5392-40-5, Citral 5660-60-6 6812-78-8, Rhodinol 6915-15-7, Malic acid 7212-44-4, Nerolidol 7235-40-7, β-Carotene 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7439-98-7, Molybdenum, biological studies 7440-09-7,

Potassium, biological studies 7440-21-3, Silicon, biological studies 7440-31-5, Tin, biological studies 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-70-2, Calcium, biological studies 7447-41-8, Lithiumchloride, biological studies 7487-88-9, Magnesium-sulfate, biological studies 7493-57-4, Acetaldehyde phenethylpropyl acetal 7553-56-2, Iodine, biological studies 7558-79-4, Disodium hydrogen phosphate 7616-22-0, γ-Tocopherol 7631-86-9, Silica, biological studies 7647-14-5, Sodium chloride, biological studies 7758-11-4 7778-77-0, Potassium dihydrogen phosphate 7779-41-1, Decanaldimethyl acetal 7782-49-2, Selenium, biological studies 7782-50-5, Chlorine, biological studies 8000-41-7, Terpineol 8007-35-0, Terpinylacetate 9000-69-5, Pectin 9000-92-4, Amylase 9001-33-6, Ficin 9001-62-1, Lipase 9001-73-4, Papain 9001-75-6, Pepsin 9001-92-7, Protease 9001-98-3, Chymosin 9002-07-7, Trypsin 9003-99-0, Peroxidase 9004-07-3, Chymotrypsin 9004-08-4, Cathepsin 9005-32-7, Alginic acid 9005-53-2, Lignin, biological studies 9013-05-2, Phosphatase 9013-19-8, Isomerase 9013-79-0, Esterase 9015-85-4, DNA-Ligase 9027-41-2, Hydrolase 9031-55-4, Carboxylase 9031-56-5, Ligase 9032-92-2, Glycosidase 9035-73-8, Oxidase 9035-82-9, Dehydrogenase 9037-29-0, Oxygenase 9047-61-4, Transferase 9055-04-3, Lyase 9055-15-6, Oxidoreductase 10032-05-0, Heptanaldimethyl acetal 10043-52-4, Calcium chloride, biological studies 10124-49-9, Iron sulfate 15431-40-0, Magnesium ascorbate 25917-35-5, Hexanol 26628-22-8, Sodium azide 33735-91-0, Guanine hydrochloride 36653-82-4, 1-Hexadecanol 37259-52-2, DNA-Ligase 50984-52-6, Anisaldehyde 84843-69-6, Tryptose 119129-70-3, Ananain 150977-36-9, Bromelain 159519-79-6, Brenzcatechin 183256-98-6, Fornesol 186209-48-3, Nonadienol

(symbiotic regenerative compns. containing microorganisms)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:605986 HCAPLUS Full-text

DOCUMENT NUMBER: 136:85190

TITLE: Effects of maize and citrus-pulp supplementation of urea-treated wheat straw on intake and productivity in female lambs

AUTHOR(S): Fonseca, A. J. M.; Dias-da-Silva, A. A.; Lourenco, A. L. G.

CORPORATE SOURCE: ICETA, Department of Animal Production, Universidade de Tras-os-Montes e Alto Douro, Vila Real, 5001, Port.

SOURCE: Animal Science (2001), 73(1), 123-136
CODEN: ANSCFO; ISSN: 1357-7298

PUBLISHER: British Society of Animal Science

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 22 Aug 2001

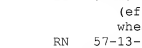
AB Two expts. with lambs given food indoors and individually penned were designed to study the effects of different levels of ground corn and citrus pulp as supplements of a diet based on urea-treated straw (5 kg urea per 100 kg straw) offered ad libitum over a period of 16 wk (experiment 1) or 10 wk (experiment 2). The voluntary intake, live-weight gain (LWG), organic matter digestibility (OMD), urinary allantoin-nitrogen (UAN) excretion and acetate clearance rate were measured. The lambs were blocked on weight and randomly assigned to the treatments described below. Ruminal outflow rate of the solid

and liquid phases from the rumen were also measured in experiment 2. In experiment 1, 20 female lambs from the Ile-de-France breed, with an initial live weight (LW) of 43 (s.e. 3.3) kg were used. Wheat straw (WS) was supplemented with 50 g/kg of fish meal (FM) and with 0, 100, 200 or 300 g/kg of ground corn on a dry-matter (DM) basis (M0, M1, M2 and M3, resp.). In experiment 2, 25 female lambs from the Portuguese breed Churra-da-Terra-Quente, with an initial LW of 24.2 (s.e. 4.3) kg were used. The straw was offered ad libitum during 10 wk and supplemented with 50 g/kg of FM and 0, 100, 200, 300, or 400 g/kg of dried citrus pulp on a DM basis (CP0, CP1, CP2, CP3 and CP4, resp.). During the expts., all animals were moved to metabolism cages to measure OMD and UAN excretion. Two addnl. incubation studies were carried out with rumen fistulated rams (experiment 1) or cows (experiment 2) given the diets described above close to the maintenance feeding level. In experiment 1 daily straw DM intake linearly decreased ($P < 0.05$) from 21.6 to 17.7 g/kg LW and LWG linearly increased ($P < 0.05$) from 51 to 154 g/day for treatments M0, M1, M2 and M3, resp. The rate of straw DM degradation was significantly decreased ($P < 0.01$) by corn supplementation. Straw OMD (kg/kg) was 0.562, 0.583, 0.547 and 0.520 and UAN (mg/day) was 620, 790, 854 and 859 for treatments M0, M1, M2 and M3, resp. Acetate clearance rate, increased ($P < 0.05$) as the level of corn inclusion increased. In experiment 2 daily straw DM intake was 23.3, 25.8, 24.7, 23.5 and 18.6 g/kg LW per day and LWG was -9, 28, 44, 64 and 67 g/day for treatments CP0, CP1, CP2, CP3 and CP4, resp. Supplementation significantly increased LWG ($P < 0.001$) but at the 400 g/kg level depressed straw DM intake. Straw OMD linearly decreased ($P < 0.05$) from 0.484 (CP0) to 0.428 (CP4) g/kg and UAN (mg/day) was 181, 303, 363, 384 and 392 for treatments CP0, CP1, CP2, CP3 and CP4, resp. Rumen outflow rate of fiber particles was unaffected by supplementation while the outflow of liquid phase tended to be increased ($P < 0.10$). The rate of DM degradation was significantly reduced ($P < 0.01$) by citrus-pulp inclusion. Acetate clearance rate was unaffected ($P > 0.05$) by citrus-pulp supplementation. The results of these expts. demonstrate that supplementation of urea-treated straw with ground corn up to 200 g/kg or with citrus pulp up to 300 g/kg of the diet DM increased or did not depress straw intake, increased the supply of microbial protein and have no significant effect on straw digestibility. The efficiency of utilization of absorbed energy was apparently improved by corn but not by citrus-pulp supplementation.

IT 57-13-6, Urea, biological studies
(effects of corn and citrus-pulp supplementation of urea-treated wheat straw on intake and productivity in female lambs)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)

IT 57-13-6, Urea, biological studies
(effects of corn and citrus-pulp supplementation of urea-treated wheat straw on intake and productivity in female lambs)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:571378 HCAPLUS Full-text

DOCUMENT NUMBER: 135:357240

TITLE: Evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs

AUTHOR(S): Barroga, Antonio J.; Pradhan, Rajeev; Tobioka, Hisaya

CORPORATE SOURCE: Department of Animal Science, School of Agriculture, Kyushu Tokai University, Kumamoto-ken, 869-1404, Japan

SOURCE: Animal Science Journal (Tokyo, Japan) (2001), 72(3), 189-197
CODEN: ASCJFY; ISSN: 1344-3941

PUBLISHER: Japanese Society of Animal Science

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 08 Aug 2001

AB This study investigated the feed intake, and energy and nitrogen partition of growing lambs fed on diet with fish silage (FS) as a major protein supplement. The FS was compared with the conventional protein feeds like fish meal (FM) and urea (UR). Six castrated and 6 female Suffolk lambs were divided into three groups and fed on Italian ryegrass silage (IRS) as basal ration at 70% on dry matter (DM) basis. The protein based concentrate mixture of FS, FM or UR was supplemented to one of the three groups at 30% DM. The DM intake of animals was not affected by the FS diet and was comparable with the other diets. Likewise, the organic matter intake and digestible organic matter intake (DOMI) of the animals were unaffected by the varying protein supplements. The nitrogen retention of the FS group was 37% higher than that of the UR group, however, the FM group was significantly higher than the UR group ($P<0.05$). The retained energy of the FS group with 116.6kJ/kgW0.75/d tended to decline compared to the other groups. The methane energy and methane production of the FS group, 79.1kJ/kgW0.75/d and 55.6L/kg DOMI, resp., had a lower tendency while the heat production with 13.2 MJ/kg DOMI tended to increase compared to the other treatments. The RQ of the FS group with 1.09 tended to be lower than the other groups. These results suggest the potential of fish silage as a major protein supplement but further investigation is needed to upgrade the palatability and nutritional value.

IT 57-13-6, Urea, biological studies
(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)

CC 18-3 (Animal Nutrition)

ST fish silage protein feed lamb

IT Silage
(Italian ryegrass; evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)

IT Appetite
Energy balance
Feed energy
Feeding experiment

Sheep
Sweet potato
(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)
IT Proteins, general, biological studies
(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)
IT Silage
(fish; evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)
IT Fish
Lolium multiflorum
(silage; evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)
IT 7727-37-9, Nitrogen, biological studies
(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)
IT 57-13-6, Urea, biological studies
(evaluation of fish silage-sweet potato mixed diet with Italian ryegrass silage as basal ration on nitrogen utilization and energy balance in growing lambs)
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:506028 HCAPLUS Full-text
DOCUMENT NUMBER: 135:226325
TITLE: Quality evaluation of different types of non-fish meal diets for yellowtail
AUTHOR(S): Watanabe, Takeshi; Aoki, Hideo; Watanabe, Kanako; Maita, Masashi; Yamagata, Yoichi; Satoh, Shuichi
CORPORATE SOURCE: Department of Aquatic Biosciences, Tokyo University of Fisheries, Tokyo, 108-8477, Japan
SOURCE: Fisheries Science (2001), 67(3), 461-469
CODEN: FSCIEH; ISSN: 0919-9268
PUBLISHER: Japanese Society of Fisheries Science
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 13 Jul 2001
AB Two feeding expts. were conducted to evaluate the feed quality of non-fish meal diets having the same protein ingredient composition but prepared as different types, and to determine the supplemental effect of crystalline essential amino acids (EAA) on feed utilization by young yellowtail, Seriola quinqueradiata. Non-fish meal diets formulated with soy protein concentrate, defatted soybean meal, corn gluten meal, meat meal, and krill meal were prepared as either soft dry pellets (SDP) or extruded pellets (EP) by using a large- or a small-sized twin screw extruder under different preparation conditions; or as a single moist pellet (SMP), each with and without EAA mixts. Com. yellowtail SDP was used as the control diet. Fish weighing 134 g and 237 g on average were reared with the exptl. diets, for 93 (net cages) and 44 (aquariums) days, resp. The fish fed both the control and test diets were found to have a good appetite. Growth rate and feed gain ratio were highest in the control diet group. The physiol. condition of fish fed the control diet was evaluated as superior compared to those on the non-fish meal diets.

Among the non-fish meal diet groups, the best performances were obtained for fish fed the SDP type diet with EAA supplement, and performance parameters excelled in the order of SDP, EP and SMP in the diets with and without supplemental EAA. This suggests that the nutritional quality of non-fish meal diet was affected by the diet preparation method. It also indicates that supplementation of EAA could improve the quality of non-fish meal diets, irresp. of the diet type, probably as a result from the enhancement of feed protein utilization.

IT 57-13-6, Urea, biological studies
(quality evaluation of different types of non-fish meal diets for yellowtail)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)

CC 18-3 (Animal Nutrition)
Section cross-reference(s): 12

IT 50-99-7, D-Glucose, biological studies 57-13-6, Urea, biological studies 57-88-5, Cholesterol, biological studies 60-27-5, Creatinine
(quality evaluation of different types of non-fish meal diets for yellowtail)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:487085 HCAPLUS Full-text

DOCUMENT NUMBER: 135:226320

TITLE: Urea in feeds for sea water farmed Atlantic salmon: Effect on growth, carcass quality and outbreaks of winter ulcer

AUTHOR(S): Rorvik, K.-A.; Steien, S. H.; Nordrum, S.; Lein, R.; Thomassen, M. S.

CORPORATE SOURCE: Institute of Aquaculture Research AS, AKV AFORSK, As-NLH, N-1432, Norway

SOURCE: Aquaculture Nutrition (2001), 7(2), 133-139
CODEN: AQNUF6; ISSN: 1353-5773

PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 06 Jul 2001

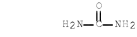
AB The effects of dietary supplementation with urea on the incidence of winter skin ulcer in sea water-farmed Atlantic salmon (Oncorhynchus mykiss) were studied. Salmon destined to be S0 smolt were fed urea-supplemented diet (0 or 20 g/kg feed) in fresh water for 8 wk prior to sea water transfer and were then fed diets with 0, 5, 10, or 20 g urea/kg feed during the first and second winters in the sea water. During the first winter, pos. relations between dietary urea and blood plasma urea and between plasma urea and plasma osmolality were observed The plasma osmolality had a neg. relationship with mortality. Of the salmon that died during the first winter in the sea, 90% had one or more skin ulcers. Both during the first and second winter there were fewer salmon with ulcer among the fish fed urea. Salmon fed 20 g urea/kg

feed tended to have higher % water in muscles. The mortality and incidence of salmon with ulcers seemed to be related to blood plasma osmolality in fish fed diets that differed in urea levels, suggesting that an osmotic imbalance may contribute to the development of winter skin ulcers in farmed salmon. Salmon fed 20 g urea/kg feed had greater body weight during the second winter in sea. Fish killed without prior starvation had higher levels of muscle urea in the 20 g/kg group compared with control fish fed no urea. A 13-day starvation period decreased urea contents in the muscle to the level seen in the control fish. No effects of dietary urea supplementation on the sensory quality of market size Atlantic salmon were observed

IT 57-13-6, Urea, biological studies
(dietary urea supplementation in sea water farmed Atlantic salmon effects on growth, carcass quality and occurrence of winter skin ulcers)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)
Section cross-reference(s): 14, 17

ST Oncorhynchus fish nutrition urea carcass skin ulcer blood osmolality

IT 57-13-6, Urea, biological studies
(dietary urea supplementation in sea water farmed Atlantic salmon effects on growth, carcass quality and occurrence of winter skin ulcers)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:472867 HCAPLUS Full-text

DOCUMENT NUMBER: 135:76174

TITLE: Stabilization of pigments and polyunsaturated oils and oil concentrates

INVENTOR(S): Breivik, Harald; Sanna, Lola Irene; Aanesen, Berit Annie

PATENT ASSIGNEE(S): Norsk Hydro Asa, Norway

SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046355	A1	20010628	WO 2000-NO439 <--	20001220

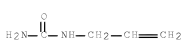
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,

VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

NO 9906411	A	20010625	NO 1999-6411 <--		19991222
NO 311041	B1	20011001			
CA 2394622	A1	20010628	CA 2000-2394622 <--		20001220
EP 1240285	A1	20020918	EP 2000-986089 <--		20001220
EP 1240285	B1	20050608			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2003518161	T	20030603	JP 2001-546853 <--		20001220
AU 770269	B2	20040219	AU 2001-22386 <--		20001220
RU 2235122	C2	20040827	RU 2002-119411 <--		20001220
AT 297455	T	20050615	AT 2000-986089 <--		20001220
ES 2240221	T3	20051016	ES 2000-986089 <--		20001220
US 2003144355	A1	20030731	US 2002-168565 <--		20021107
PRIORITY APPLN. INFO.:			NO 1999-6411 <--	A	19991222
			WO 2000-NO439 <--	W	20001220

OTHER SOURCE(S): MARPAT 135:76174
ED Entered STN: 29 Jun 2001
AB The method for stabilizing vegetable, marine and single cell oils or oil concs. as well as pigments like astaxanthin and canthaxanthin by treating the oil or oil concs. with ≥1 amines or amides R1N(R2)R3 (R1 , R2, R3 = H, C1-10 alkyl, C2-10 alkenyl, RCO-, RNHCOCO-; R = H, C1-10 alkyl,C2-10 alkenyl, R'NHCO-; R' = H, C1-10 alkyl,C2-10 alkenyl). The pigments and polyunsatd. oils and oil concs. are useful for feed, health care products and a composition for prophylaxis or therapeutical treatment.
IT 96-31-1, N,N'-Dimethylurea 557-11-9, Allylurea
(stabilization of pigments and polyunsatd. oils and oil concs.)
RN 96-31-1 HCAPLUS
CN Urea, N,N'-dimethyl- (CA INDEX NAME)

RN 557-11-9 HCAPLUS
CN Urea, N-2-propen-1-yl- (CA INDEX NAME)



IC ICM C11B005-00
ICS A23D009-06; A23K001-16; A23K001-18; A61K031-23
CC 17-6 (Food and Feed Chemistry)
Section cross-reference(s): 63
IT Fats and Glyceridic oils, biological studies
(fish; stabilization of pigments and polyunsatd. oils and oil concs.)
IT Fats and Glyceridic oils, biological studies
(marine; stabilization of pigments and polyunsatd. oils and oil concs.)
IT Fish
(meal; stabilization of pigments and polyunsatd. oils and oil concs. for)
IT Antioxidants
Feed
Pigments, biological
(stabilization of pigments and polyunsatd. oils and oil concs.)
IT 96-31-1, N,N'-Dimethylurea 111-26-2, Hexylamine 471-46-5, Oxamide 541-35-5, Butyramide 557-11-9, Allylurea 7087-68-5, n-Ethyldiisopropylamine
(stabilization of pigments and polyunsatd. oils and oil concs.)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:460222 HCAPLUS Full-text
DOCUMENT NUMBER: 135:303049
TITLE: Enrichment of EPA and DHA from fish oil by urea inclusion-supercritical fluid extraction
AUTHOR(S): Zhou, Yong-yi; Pan, Zhi-yan; Lin, Chun-mian
CORPORATE SOURCE: College of Biological & Eronmental Engineering, Zhejiang University of Technology, Hangzhou, 310032, Peop. Rep. China
SOURCE: Zhejiang Gongye Daxue Xuebao (2000), 28(4), 302-305
CODEN: ZDXUF2; ISSN: 1006-4303
PUBLISHER: Zhejiang Gongye Daxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
ED Entered STN: 27 Jun 2001
AB EPA and DHA in fish oil were enriched by urea inclusion-supercrit. fluid extraction with carbon dioxide. Results show that this combined method can enrich EPA and DHA efficiently, with the concentration of (EPA + DHA) increasing from 6.31% to 56.7%. The mole ratio of urea to fatty acid esters and the SFE temps. have important effects on the concentration of (EPA + DHA), while SFE pressure does not have an obvious impact on the enrichment. Optimum conditions were: mole ratio of urea to fatty acid ester 9:1; and SFE pressure and temperature 24 MPa and 45°, resp.
IT 57-13-6, Urea, biological studies
(enrichment of EPA and DHA from fish oil by urea inclusion-supercrit. fluid extraction)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

CC 17-9 (Food and Feed Chemistry)
ST fatty acid supercrit fluid extn fish oil; EPA DHA supercrit fluid extn fish oil; urea supercrit fluid extn fish oil
IT Fats and Glyceridic oils, biological studies
(fish; enrichment of EPA and DHA from fish oil by urea inclusion-supercrit. fluid extraction)
IT Extraction
(supercrit.; enrichment of EPA and DHA from fish oil by urea inclusion-supercrit. fluid extraction)
IT 57-13-6, Urea, biological studies 124-38-9, Carbon dioxide, biological studies
(enrichment of EPA and DHA from fish oil by urea inclusion-supercrit. fluid extraction)
IT 6217-54-5P 10417-94-4P
(enrichment of EPA and DHA from fish oil by urea inclusion-supercrit. fluid extraction)

L44 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:310610 HCAPLUS Full-text
DOCUMENT NUMBER: 136:33080
TITLE: Acute toxicity of Inipol EAP22, an oil spill bioremediation fertilizer, to four marine species
AUTHOR(S): Sakami, Tomoko; Takayanagi, Kazufumi; Shiraishi, Manabu
CORPORATE SOURCE: Natl. Res. Inst. of Aquaculture, Mie, 516-0193, Japan
SOURCE: Nippon Suisan Gakkaishi (2001), 67(2), 302-303
CODEN: NSUGAF; ISSN: 0021-5392
PUBLISHER: Nippon Suisan Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 02 May 2001
AB The toxicity of Inipol EAP22 (a nutrient) containing oleic acid tri(laureth-4) phosphate, 2-butoxyethanol and urea, to 4 fish , namely, Paralichthys olivaceus, Sillago japonica, Tigriopus japonicus, and Pinctada fucata, was studied. Studies indicated that use of Inipol as a nutrient supplement requires a careful preparation, making it sure that the level of administration to fish is low enough to safe-guard growing small fish.
IT 57-13-6, Urea, biological studies
(in fish nutrient, Inipol EAP22 in relation to toxicity)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

CC 4-4 (Toxicology)
ST toxicity Inipol fish safety

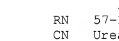
IT Safety
(acute toxicity of Inipol EAP22, bioremediation fertilizer, to fish in relation to)
IT Fish
Paralichthys olivaceus
Pinctada fucata
Sillago japonica
Tigriopus japonicus
(nutrient Inipol EAP22 to fish in relation to toxicity)
IT 57-13-6, Urea, biological studies 111-76-2, 2-Butoxyethanol 112-80-1, Oleic acid, biological studies 31800-90-5
(in fish nutrient, Inipol EAP22 in relation to toxicity)

L44 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:520234 HCAPLUS Full-text
DOCUMENT NUMBER: 133:207176
TITLE: Interaction of protein nutrition and laidlomycin on feedlot growth performance and digestive function in Holstein steers
AUTHOR(S): Zinn, R. A.; Alvarez, E. G.; Montano, M. F.; Ramirez, J. E.
CORPORATE SOURCE: Desert Research and Extension Center, University of California, El Centro, CA, 92243, USA
SOURCE: Journal of Animal Science (Savoy, Illinois) (2000), 78(7), 1768-1778
CODEN: JANSAG; ISSN: 0021-8812
PUBLISHER: American Society of Animal Science
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 01 Aug 2000
AB Two isonitrogenous diets with 12.5% crude protein (CP) containing 20 (20% NPN) or 40% (40% NPN) N as non-protein N were combined with 0 or 10 mg laidlomycin propionate (LP)/kg in feedlot Holstein steer feeding. Changes in dietary NPN/N ratio were made by partial substitution of urea N for fish meal N. In Trial 1, 4 Holstein steers (349 kg) with cannulas in the rumen and proximal duodenum were used to evaluate the treatment effects on digestive functions. The total tract organic matter (OM) digestion was slightly greater (1.2%) for diets containing 20% N as NPN due to greater (3.4%) postruminal OM digestion. LP decreased the passage of microbial N to the small intestine (7.4%) and ruminal degradation of dietary CP (DIP, 8.1%). Decreasing the NPN/N ratio decreased the microbial N flow to the small intestine (7.5%) and DIP (15%) and increased (6%) the flow of indispensable amino acids to the small intestine. LP increased ruminal pH value. There were no treatment effects on ruminal molar proportions of acetate or propionate. In Trial 2, 120 Holstein steers (122 kg) were used to evaluate the treatment effects on growth performance. Decreasing the NPN/N ratio increased the average daily gains (ADG) by 36, 40, and 16%, resp., for the initial three 56-day periods of the trial. Overall, the ADG was 17% greater in cattle fed 20 vs. 40% NPN. Decreasing the NPN/N ratio increased the feed/gain efficiency by 17 and 14%, resp., in the initial two 56-day periods. Overall, the gain efficiency was 6% greater with 20% NPN. The dietary NPN/N ratio did not influence the net energy value of the diets. LP did not affect the dry matter intake, but increased ADG (6%) and gain efficiency (5%) and decreased (11%) the maintenance energy requirements. Protein nutrition limited the growth performance of calves fed 20% NPN during the initial 112 days of the trial. With the 40% NPN diets, protein nutrition limited the growth performance throughout most of the trial (days 1 to 224). Thus, LP can enhance daily body weight gain and gain efficiency of calf-fed Holstein steers. Conventional urea-based diets do not diminish the response to LP, although they may not meet the metabolizable amino acid requirements of calf-fed Holsteins during the first 3 quarters of the feeding period.

IT 57-13-6, Urea, biological studies
(dietary protein, urea and laidlomycin effects on feedlot growth performance and digestive function in Holstein steers)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

CC 18-3 (Animal Nutrition)
Section cross-reference(s): 17
IT 57-13-6, Urea, biological studies
(dietary protein, urea and laidlomycin effects on feedlot growth performance and digestive function in Holstein steers)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:281131 HCAPLUS Full-text
DOCUMENT NUMBER: 133:309235
TITLE: The solubilization rates of squid meat gel in protein-solubilizing liquids
AUTHOR(S): Ishikawa, Satoru
CORPORATE SOURCE: Aomori Prefect. Res. Stn. Fish Process., Hachinohe, 031-0831, Japan
SOURCE: Aomori-ken Suisanbutsu Kako Kenkyusho Kenkyu Hokoku (2000), Volume Date 1998 25-28
CODEN: ASKHEX; ISSN: 0912-1056
PUBLISHER: Aomori-ken Suisanbutsu Kako Kenkyusho
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
ED Entered STN: 01 May 2000
AB Squid meat is utilized as a surimi-based product (fish meat paste). To investigate the mechanism of gelatinization of squid meat, the effect of urea on the solubilization of the gel was examined The gel was solubilized with 5M urea at 40°. The solubilization ratio and the change in subunit composition corresponded with the change in its gel strength.
IT 57-13-6, Urea, biological studies
(solubilization rates of squid meat gel in protein-solubilizing liqs.)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



CC 17-7 (Food and Feed Chemistry)
IT Fish
(surimi; solubilization rates of squid meat gel in protein-solubilizing liqs.)
IT 57-13-6, Urea, biological studies

(solubilization rates of squid meat gel in protein-solubilizing liqs.)

L44 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:34701 HCAPLUS Full-text
DOCUMENT NUMBER: 132:77839
TITLE: Stabilisation of pigments and polyunsaturated oils
INVENTOR(S): Breivik, Harald; Sanna, Lola Irene
PATENT ASSIGNEE(S): Norsk Hydro Asa, Norway
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000001249	A1	20000113	WO 1999-NO216 <--	19990625
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NO 9803050	A	20000103	NO 1998-3050 <--	19980701
NO 309795	B1	20010402		
CA 2336272	A1	20000113	CA 1999-2336272 <--	19990625
AU 9943999	A	20000124	AU 1999-43999 <--	19990625
EP 1091657	A1	20010418	EP 1999-926994 <--	19990625
EP 1091657	B1	20030528		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002519479	T	20020702	JP 2000-557705 <--	19990625
AT 241284	T	20030615	AT 1999-926994 <--	19990625
PT 1091657	T	20030930	PT 1999-926994 <--	19990625
ES 2200521	T3	20040301	ES 1999-926994 <--	19990625
ZA 2000007556	A	20020315	ZA 2000-7556 <--	20001215
US 6630188	B1	20031007	US 2001-720669 <--	20010302
PRIORITY APPLN. INFO.:			NO 1998-3050 A <--	19980701
			WO 1999-NO216 W <--	19990625

ED Entered STN: 14 Jan 2000
AB The present invention relates to a method for stabilizing vegetable and animal oils as well as pigments like astaxanthin and canthaxanthin with regard to oxidation It also relates to a feed for salmonids, and a method for

optimizing the effect of the pigment in feed for salmonids. An essential feature of the invention is treatment by or presence of urea.

IT 57-13-6, Urea, biological studies
(stabilization of pigments and polyunsatd. oils for salmonid feed)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)

IC ICM A23K001-16
ICS A23K001-18

CC 17-6 (Food and Feed Chemistry)

IT Fats and Glyceridic oils, biological studies
(fish; stabilization of pigments and polyunsatd. oils for salmonid feed)

IT 50-81-7, Vitamin C, biological studies 57-13-6, Urea, biological studies 137-66-6, Ascorbyl palmitate
(stabilization of pigments and polyunsatd. oils for salmonid feed)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:594404 HCAPLUS Full-text

DOCUMENT NUMBER: 129:302038

TITLE: A trial to culture yellowtail with non-fishmeal diets

AUTHOR(S): Watanabe, Takeshi; Aoki, Hideo; Shimamoto, Kunikazu; Hadzuma, Masataka; Maita, Masashi; Yamagata, Yoichi; Kiron, Viswanath; Satoh, Shuichi

CORPORATE SOURCE: Laboratory of Fish Nutrition, Department of Aquatic Biosciences, Tokyo University of Fisheries, Tokyo, 108-8477, Japan

SOURCE: Fisheries Science (1998), 64(4), 505-512
CODEN: FSCIEH; ISSN: 0919-9268

PUBLISHER: Japanese Society of Fisheries Science

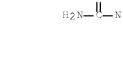
DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 18 Sep 1998

AB The use of non-fish meal diets for rearing Seriola quinqueradiata yellowtail fish was studied. The exptl. diets were formulated with soy protein concentrate, defatted soybean meal, corn gluten meal, and meat meal as protein sources. Juvenile (average 13 g) and young (average 130 g) yellowtail fish were fed the exptl. diets for 52 and 75 days, resp., and their body growth and feed performance parameters were compared with the fish fed the fish meal control diet. The exptl. diets were of poor palatability to the juvenile fish as reflected by their inferior feed performance and growth compared to controls. Young fish fed the exptl. diets showed active feeding and normal body growth for the first 46 days of feeding, but thereafter their growth stagnated and poor feed/gain ratio and high mortality were observed irresp. of the dietary treatments. At the end of the expts., both juvenile and young fish fed the exptl. diets had the green liver syndrome and poor blood characteristics, indicative of the abnormal physiol. status. Thus, the non-fish meal diets were not efficient in maintaining the normal growth and health of juvenile and young yellowtail fish during the rearing period.

IT 57-13-6, Urea, biological studies
(dietary non-fish meal diets use for rearing yellowtail fish)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)
IT 50-99-7, D-Glucose, biological studies 56-87-1, L-Lysine, biological studies 57-13-6, Urea, biological studies 57-88-5, Cholesterol, biological studies 60-27-5, Creatinine 63-68-3, L-Methionine, biological studies 72-19-5, L-Threonine, biological studies 9001-78-9
(dietary non-fish meal diets use for rearing yellowtail fish)
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:567054 HCAPLUS Full-text
DOCUMENT NUMBER: 129:275222
TITLE: Effects of fish meal and sodium bentonite on daily gain, wool growth, carcass characteristics, and ruminal and blood characteristics of lambs fed concentrate diets
AUTHOR(S): Walz, L. S.; White, T. W.; Fernandez, J. M.; Gentry, L. R.; Blouin, D. C.; Froetschel, M. A.; Brown, T. F.; Lupton, C. J.; Chapa, A. M.
CORPORATE SOURCE: Agricultural Center, Louisiana State University, Baton Rouge, LA, 70803, USA
SOURCE: Journal of Animal Science (1998), 76(8), 2025-2031
CODEN: JANSAG; ISSN: 0021-8812
PUBLISHER: American Society of Animal Science
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 07 Sep 1998
AB The effects of replacing some soybean meal (SBM) protein with fish meal (FM) protein in diets adequate and slightly deficient in crude protein (CP, in dry matter) and effects of 0.75% sodium bentonite (NaB) additive on the production performance and ruminal and blood metabolites were studied in individually fed Suffolk lambs. The diets contained corn, SBM, and cottonseed hulls. In Experiment 1, 15 lambs were fed diets with 11% CP + 3% FM and 13% CP + 0 or 3% FM. Lambs fed 11% CP + 3% FM or 13% CP + 0% FM had similar dry matter intake (DMI) and average daily gains (ADG). The gain and feed efficiency were slightly improved by the 13% CP + 3% FM diet. In Experiment 2, 32 lambs were fed 4 diets with 13.5% CP in dry matter in a 2 + 2 factorial arrangement with 0 or 3% FM and 0 or 0.75% NaB on as-fed basis. The DMI and ADG were increased by FM and NaB supplementation. Interactions revealed that NaB increased DMI, ADG, gain per feed (g/kg DMI), and blood plasma urea N concns. in the absence of FM, but not in the presence of FM in the diet. Neither FM nor NaB influenced the wool growth. The concns. of total ruminal volatile fatty acids were increased by FM and NaB. Differences in the mineral content of the

phalanx bone, liver, and kidney were small and may have been related to the mineral content of diets and effects of NaB on mineral solubilities. The similar DMI and ADG of lambs fed FM and NaB sep. and in combination suggest that their beneficial effect is not additive.

IT 57-13-6, Urea, biological studies
(dietary fish meal and sodium bentonite effects on daily gains, wool growth, carcass composition, and ruminal and blood indexes in sheep lambs)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)

CC 18-3 (Animal Nutrition)

IT 57-13-6, Urea, biological studies 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-09-7, Potassium, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7440-70-2, Calcium, biological studies
(dietary fish meal and sodium bentonite effects on daily gains, wool growth, carcass composition, and ruminal and blood indexes in sheep lambs)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:371341 HCAPLUS Full-text

DOCUMENT NUMBER: 128:320919

TITLE: Method for conservation of granular fish caviar

INVENTOR(S): Peganov, Eduard M.

PATENT ASSIGNEE(S): Rodionov, Oleg Valentinovich, Russia; Nikolaeva, Irina Sergeevna

SOURCE: Russ. From: Izobreteniya 1997, (35), 355. CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2098975	C1	19971220	RU 1996-119490 <--	19960927
PRIORITY APPLN. INFO.:			RU 1996-119490 <--	19960927

ED Entered STN: 17 Jun 1998

AB Title only translated.

IT 57-13-6, Carbamide, biological studies
(method for preservation of granular fish caviar)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)

IC ICM A23B004-14
CC 17-7 (Food and Feed Chemistry)
IT Caviar
(method for preservation of granular fish caviar)
IT 57-13-6, Carbamide, biological studies 7647-14-5, Sodium chloride, biological studies
(method for preservation of granular fish caviar)

L44 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:268442 HCAPLUS Full-text
DOCUMENT NUMBER: 128:326258
TITLE: Biochemical media system for reducing pollution
INVENTOR(S): Reddy, Malireddy S.; Reddy, Syama M.
PATENT ASSIGNEE(S): Reddy, Malireddy S., USA; Reddy, Syama M.
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9817592	A1	19980430	WO 1997-US18737 <--	19971021
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5876990	A	19990302	US 1996-731886 <--	19961022
AU 9749857	A	19980515	AU 1997-49857 <--	19971021
EP 946427	A1	19991006	EP 1997-912750 <--	19971021
EP 946427	B1	20040721		
R: DE, DK, FR, GB, IE				
TW 570975	B	20040111	TW 1997-86115579 <--	19971022
PRIORITY APPLN. INFO.:			US 1996-731886 A <--	19961022
			WO 1997-US18737 W <--	19971021

ED Entered STN: 11 May 1998
AB A first media provides an oxygen inducer such as catalase, bound and stabilized in pellet form to dissipate slowly into aqueous surroundings. A second media provides an oxygen supplier such as a peroxide, stabilized by combination with a proteinaceous compound such as urea and bound in a matrix

that limits oxygen release. The two media are combined in aqueous environment to generate nascent oxygen at a modulated rate such that the oxygen is efficiently absorbed into the surrounding aqueous environment, promoting growth of aerobic species and reducing biol. pollution. Specific adaptations demonstrate benefits of use in shrimp of fish ponds, raw milk, fruit juice, fresh food, silage and animal feed, fertilizer, plumbing systems, and grease traps. When used in ponds, further adaptations reduce algae and phytoplankton populations.

IT 124-43-6
(biochem. media system for adding oxygen, promoting biol. activity, and reducing pollution)

RN 124-43-6 HCAPLUS

CN Urea, compd. with hydrogen peroxide (H2O2) (1:1) (CA INDEX NAME)

CM 1

CRN 7722-84-1
CMF H2 O2

CM 2

CRN 57-13-6
CMF C H4 N2 O

IC ICM C02F001-72
ICS C02F003-34

CC 61-5 (Water)
Section cross-reference(s): 5, 16, 17, 19, 60

IT 50-81-7, L-Ascorbic acid, biological studies 57-13-6, Urea, biological studies 63-42-3 124-43-6 137-40-6 144-55-8, Carbonic acid monosodium salt, biological studies 302-04-5, Thiocyanate, biological studies 471-34-1, Carbonic acid calcium salt (1:1), biological studies 1313-60-6, Sodium peroxide (Na2(O2)) 1335-26-8, Magnesium peroxide 2650-18-2 7429-90-5, Aluminum, biological studies 7429-90-5D, Aluminum, salts 7439-95-4, Magnesium, biological studies 7439-95-4D, Magnesium, compds. 7440-70-2, Calcium, biological studies 7440-70-2D, Calcium, compds. 7631-86-9, Silica, biological studies 7681-38-1 7722-84-1, Hydrogen peroxide (H2O2), biological studies 7758-98-7, Sulfuric acid copper(2+) salt (1:1), biological studies 9000-30-0, Guar gum 9000-92-4, Amylase 9001-05-2, Catalase 9001-37-0 9001-62-1 9001-92-7, Proteinase 9003-99-0, Peroxidase 9005-32-7, Alginic acid 9005-53-2, Lignin, biological studies 9012-54-8, Cellulase 9028-79-9 9031-11-2 9032-75-1, Polygalacturonase 15630-89-4
(biochem. media system for adding oxygen, promoting biol. activity, and reducing pollution)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:776009 HCAPLUS Full-text
DOCUMENT NUMBER: 128:34070
TITLE: Animal feed manufacturing method based on fish oil
INVENTOR(S): Park, Soo Kil; Lee, Sang Hak
PATENT ASSIGNEE(S): S. Korea
SOURCE: U.S., 3 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5693358	A	19971202	US 1995-545873 <--	19951020
PRIORITY APPLN. INFO.:			US 1995-545873 <--	19951020

ED Entered STN: 12 Dec 1997
AB Disclosed is an animal feed manufacturing method in which powdered fish oil of a main raw material is obtained by processing fishes containing a large amount of docosahexaenoic acid and eicosapentaenoic acid. The animal feed manufacturing method includes the steps of adding urea to fish oil together with a monosodium glutamate byproduct and fermenting the fish oil, sep. removing water and phospholipid contained in the fermented fish oil, adding quicklime to the separated fish oil and cooling the quicklime-added fish oil via gumming and salting-out processes, and thereby obtaining powdered animal feed using a cooling roller or presser.
IT 57-13-6, Urea, biological studies
(processing method for animal feed containing fish oil)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

IC ICM A23K001-10
ICS A23D007-04; C11B003-00
INCL 426643000
CC 17-12 (Food and Feed Chemistry)
ST fish oil glutamate urea feed
IT Fats and Glyceridic oils, biological studies
(fish; processing method for animal feed containing fish oil)
IT Feed
Heat
(processing method for animal feed containing fish oil)
IT Lime (chemical)
(processing method for animal feed containing fish oil)

IT Phospholipids, processes
(processing method for animal feed containing fish oil)
IT 6217-54-5, Docosahexaenoic acid 10417-94-4, Eicosapentaenoic acid
(processing method for animal feed containing fish oil)
IT 57-13-6, Urea, biological studies 142-47-2, Monosodium glutamate
(processing method for animal feed containing fish oil)

L44 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:738696 HCAPLUS Full-text
DOCUMENT NUMBER: 128:33974
TITLE: Separation of ω3 polyunsaturated fatty acids from fish oil and stabilization of the oil against autoxidation
AUTHOR(S): Han, Daeseok; Shin, Hyun-Kyung; Yoon, Suk Hoo
CORPORATE SOURCE: Korea Food Research Institute, Kyunggido, 463-420, S. Korea
SOURCE: ACS Symposium Series (1997), 674(Flavor and Lipid Chemistry of Seafoods), 255-263
CODEN: ACSMC8; ISSN: 0097-6156
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 24 Nov 1997
AB Fatty acid fractions rich in eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) could be obtained from sardine oil by solvent fractional crystallization and urea adduct formation methods. The former method was based on the solubility difference of saturated and unsatd. fatty acid salts in ethanol. Since the composition of EPA and DHA changed due to the kind of organic solvent used as the reaction medium for urea adduct formation, EPA and DHA could selectively be enriched. Ascorbic acid could be solubilized in fish oil via fish oil/lecithin/water reverse micelles. When 200 ppm ascorbic acid was used together with 4,000ppm δ-tocopherol, the induction period of the stabilized fish oil was extended 22 times as compared to that of a control sample. Combined use of tocopherol and ascorbic acid could inhibit the production of carbonyl and volatile compds., and the oxidative polymerization of the polyunsatd. fatty acids.
IT 57-13-6, Urea, biological studies
(adduct formation with; separation of ω3 polyunsatd. fatty acids from fish oil and stabilization of oil against autoxidn.)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

CC 17-9 (Food and Feed Chemistry)
ST fish oil omega3 fatty acid purifn
IT Fats and Glyceridic oils, processes
(sardine; separation of ω3 polyunsatd. fatty acids from fish oil and stabilization of oil against autoxidn.)
IT Autoxidation
(separation of ω3 polyunsatd. fatty acids from fish oil and stabilization of oil against autoxidn.)

IT 57-13-6, Urea, biological studies
(adduct formation with; separation of ω3 polyunsatd. fatty acids from fish oil and stabilization of oil against autoxidn.)
IT 64-17-5, Ethanol, biological studies
(fractional crystallization with; separation of ω3 polyunsatd. fatty acids from fish oil and stabilization of oil against autoxidn.)
IT 50-81-7, Ascorbic acid, biological studies 119-13-1, δ-Tocopherol
(separation of ω3 polyunsatd. fatty acids from fish oil and stabilization of oil against autoxidn.)
IT 6217-54-5P 24880-45-3P
(separation of ω3 polyunsatd. fatty acids from fish oil and stabilization of oil against autoxidn.)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:326079 HCAPLUS Full-text
DOCUMENT NUMBER: 127:49609
TITLE: Effect of moisture content and different levels of additives on chemical composition and in vitro dry matter digestibility of rice straw
AUTHOR(S): Pradhan, Rajeev; Tobioka, Hisaya; Tasaki, Iwao
CORPORATE SOURCE: School of Agriculture, Kyushu Tokai University, Kumamoto, 869-14, Japan
SOURCE: Animal Science and Technology (1997), 68(3), 273-284
CODEN: ALSTEQ; ISSN: 0918-2365
PUBLISHER: Japanese Society of Zootechnical Science
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 22 May 1997
AB The effects of additives and a combination of alkaline or enzyme treatment with that of a nitrogenous compound on improvement for the utilization of rice straw by ruminants were determined In experiment 1, rice straw of ca 500 g dry matter (DM) each was treated with sodium hydroxide (NaOH), calcium hydroxide (Ca(OH)2), urea, ammonia, NaOH+urea, Ca(OH2) + urea, and cellulolytic enzymes such as clampzyme and cellulase with or without urea adjusting the DM level to 65% or 80% and the effect on the chemical composition and the in vitro dry matter digestibility (IVDMD) of rice straw was observed The pH of the straw increased with NaOH, Ca(OH)2 and urea treatments. The treatment of straw with urea alone or in combination with other chems. prevented the mold growth except for Ca(OH)2+urea at 80% DM level. The treatment of straw with urea or ammonia increased the crude protein (CP) content. Ammonia formation from urea was partly inhibited by the addition of NaOH or Ca(OH)2. The crude ash content was increased by NaOH or Ca(OH)2 treatment. The treatments lowered the neutral detergent fiber (NDF), which was generally lower at 65% DM level than at 80%. At 65% DM level, NaOH and Ca(OH)2 treatments remarkably improved IVDMD depending on the concentration of the additives. Urea and ammonia treatment also improved IVDMD, but the extent was not so great. The addition of urea to alkalis showed slight increase on IVDMD. In general, the IVDMD of the treated straws was higher at 65% DM level than at 80%. The improvement achieved by ammonia treatment in experiment 1 was very low. Therefore, experiment 2 was conducted to verify the effect of ammonia on the IVDMD value of rice straw. In experiment 2, rice straw of 5 kg DM each was treated with either 6 kg urea or 3 kg ammonia per 100 kg straw DM and the DM level was adjusted to 65%, 72.5% or 80%. Ammonia treatment tended to lower the NFD and hemicellulose content.

The IVDMD was higher by ammonia treatment than by urea treatment ($P<0.05$). The difference in the extent of improvement by ammonia treatment between the experiment 1 and 2 might be due to the different treatment methods. From these results, the treatment with NaOH 2%+urea 4% at both DM levels and Ca(OH)2 4%+urea 4% at 65% DM level seems to be more favorable for higher CP content, prevention of mold growth and improved IVDMD.

IT 191171-97-8 191171-98-9
(effect of moisture content and different levels of additives on chemical composition and in vitro dry matter digestibility of rice straw)

RN 191171-97-8 HCAPLUS
CN Cellulase, mixt. with urea (9CI) (CA INDEX NAME)

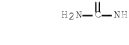
CM 1

CRN 9012-54-8
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-13-6
CMF C H4 N2 O



RN 191171-98-9 HCAPLUS
CN Urea, mixt. with clampzyme (9CI) (CA INDEX NAME)

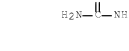
CM 1

CRN 150103-94-9
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-13-6
CMF C H4 N2 O



CC 17-11 (Food and Feed Chemistry)

IT Straw
(rice; effect of moisture content and different levels of additives on chemical composition and in vitro dry matter digestibility of rice straw)

IT 57-13-6, Urea, biological studies 1305-62-0, Calcium hydroxide (Ca(OH)2), biological studies 1310-73-2, Sodium hydroxide, biological studies 7664-41-7, Ammonia, biological studies 9012-54-8, Cellulase 142011-85-6 150103-94-9, Clampzyme 153109-80-9 191171-97-8 191171-98-9 191171-99-0
(effect of moisture content and different levels of additives on chemical composition and in vitro dry matter digestibility of rice straw)
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:145093 HCAPLUS Full-text
DOCUMENT NUMBER: 126:143496
TITLE: Composition of mycoprotein bait for fishes and shrimps and its method of preparation
INVENTOR(S): Lin, Lushan; Peng, Shiyao
PATENT ASSIGNEE(S): Sandeli Mycoprotein Technology development Co., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 12 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1096640	A	19941228	CN 1993-107555 <--	19930625
PRIORITY APPLN. INFO.:			CN 1993-107555 <--	19930625

ED Entered STN: 06 Mar 1997
AB The composition and process of preparation of a mycoprotein bait for fishes and shrimps are disclosed. This mycoprotein bait contains marine algae industrial residue(50-60%), thallus power(8-15%), nitrogen compound(15-30%), yeast(2-10%) and small amount of enzyme activator and nutritions. Mycoprotein bait is easy to make, inexpensive, and highly effective.
IT 57-13-6, Urea, biological studies
(composition of mycoprotein bait for fishes and shrimps and its method of preparation)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

IC ICM A23K001-18
CC 17-12 (Food and Feed Chemistry)
ST mycoprotein fish shrimp bait; marine algae industrial residue fish bait
IT Agaricus bisporus
Bean (Phaseolus vulgaris)
Fish
Flammulina velutipes

Laminaria japonica
Lentinula edodes
Marine algae
Porphyra haitanensis
Shrimp
Smilax
Yeast
(composition of mycoprotein bait for fishes and shrimps and its method of preparation)

IT Amino acids, biological studies
Carbohydrates, biological studies
Trace elements, biological studies
(composition of mycoprotein bait for fishes and shrimps and its method of preparation)

IT Proteins, general, biological studies
(dietary; composition of mycoprotein bait for fishes and shrimps and its method of preparation)

IT Fish
(meal; composition of mycoprotein bait for fishes and shrimps and its method of preparation)

IT 57-13-6, Urea, biological studies 471-34-1, Calcium carbonate, biological studies 7487-88-9, Magnesium sulfate, biological studies 7727-37-9, Nitrogen, biological studies 7778-18-9, Calcium sulfate 7778-53-2, Potassium phosphate 7783-28-0 9005-65-6, Tween 80 16690-92-9, Disodium Glutamate
(composition of mycoprotein bait for fishes and shrimps and its method of preparation)

L44 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:256780 HCAPLUS Full-text
DOCUMENT NUMBER: 124:287720
TITLE: Sodium carbonate pulping liquor as a binder for animal feed
INVENTOR(S): Major, William
PATENT ASSIGNEE(S): Can.
SOURCE: Can. Pat. Appl., 11 pp.
CODEN: CPXXEB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 2167363	A1	19960216	CA 1996-2167363 <--	19960116
CA 2167363	C	19990907		
PRIORITY APPLN. INFO.:			CA 1996-2167363 <--	19960116

ED Entered STN: 02 May 1996
AB Sodium carbonate pulping liquor (SCPL), in liquid or powder form, can be used as a pellet binder in animal feed. SCPL is produced by cooking wood chips in steam at a pressure of 1100 KPA in the presence of a milk solution of Na2CO3 (115 g/L) for about 14 min. The wood chips are then compressed to sep. the spent SCPL from the wood chips, and the spent liquor is further evaporated to produce a soln of 45% solids or a dry solid. Animal feed is prepared by adding at least about 0.3-1% of SCPL (by weight of feed) to the hopper of a pellet mill prewarmed to 150°F; when feed pellets are prepared using SCPL in liquid form, the 45% solid liquid is injected directly into the conditioning chamber of the pellet mill (at ≥1 to 2% SCPL by weight of feed). Its use

provides a durable, abrasion-resistant pellet that can withstand rough handling without crumbling. Various additives can be added to the SCPL, including catalysts which will increase the rate of reaction or gel time of the SCPL, or any compds. which cause the liquor to polymerize or become more viscous.

IT 21478-49-9, Urea, ammonium salt
(catalyst; sodium carbonate pulping liquor as a binder for animal feed)

RN 21478-49-9 HCAPLUS

CN Urea, ammonium salt (9CI) (CA INDEX NAME)

IC ICM A23K001-00

CC 17-12 (Food and Feed Chemistry)

IT Catalysts and Catalysis
Polymerization catalysts
Thickening agents
(additive; sodium carbonate pulping liquor as a binder for animal feed)

IT Molasses
(polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)

IT Binding materials
Feed
(sodium carbonate pulping liquor as a binder for animal feed)

IT Pulping liquors, biological studies
(sodium carbonate-based, spent; sodium carbonate pulping liquor as a binder for animal feed)

IT Bentonite, biological studies
(calcian, polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)

IT Syrups
(hydrolyzed starch, polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)

IT Bentonite, biological studies
(sodian, polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)

IT 77-92-9, Citric acid, biological studies 1305-62-0, Hydrated lime, biological studies 1305-79-9, Calcium dioxide 1310-73-2, Sodium hydroxide, biological studies 1344-09-8, Sodium silicate 7664-38-2, Phosphoric acid, biological studies 7664-93-9, Sulfuric acid, biological studies 7697-37-2, Nitric acid, biological studies 7786-30-3, Magnesium chloride, biological studies 9011-05-6 10043-52-4, Calcium chloride, biological studies 10103-46-5, Calcium phosphate 21478-49-9, Urea, ammonium salt
(catalyst; sodium carbonate pulping liquor as a binder for animal feed)

IT 96-33-3, Methyl acrylate 471-34-1, Calcium carbonate, biological studies 9002-89-5, Polyvinyl alcohol 9003-05-8, Polyacrylamide 9005-25-8, Corn starch, biological studies 10086-45-0, Calcium

pyrophosphate 21056-98-4, Calcium phosphite (caHPO3) (polymerization agent or viscosifier; sodium carbonate pulping liquor as a binder for animal feed)

L44 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:774640 HCAPLUS Full-text
DOCUMENT NUMBER: 123:168257
TITLE: Separation of lipophilic compounds by complexing with urea.
INVENTOR(S): Fex, Tomas; Olsson, Gunnar
PATENT ASSIGNEE(S): Trikonex AB, Swed.
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9511216	A1	19950427	WO 1994-SE982 <--	19941019
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2174426	A1	19950427	CA 1994-2174426 <--	19941019
AU 9480085	A	19950508	AU 1994-80085 <--	19941019
AU 670723	B2	19960725		
EP 724557	A1	19960807	EP 1994-931255 <--	19941019
EP 724557	B1	19980819		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
CN 1135747	A	19961113	CN 1994-194240 <--	19941019
CN 1051296	B	20000412		
JP 09504020	T	19970422	JP 1994-511695 <--	19941019
AT 169897	T	19980915	AT 1994-931255 <--	19941019
US 5734071	A	19980331	US 1996-628703 <--	19960416
NO 9601507	A	19960422	NO 1996-1507 <--	19960417
PRIORITY APPLN. INFO.:			SE 1993-3446 A <--	19931020
			WO 1994-SE982 W <--	19941019

ED Entered STN: 06 Sep 1995
AB The invention relates to an urea fractionation process for purification of e.g. fatty acids and derivs. thereof. Urea complexation takes place under heterogeneous conditions, using a solvent or solvent mixture wherein the fatty acids (or derivs.) are only slightly soluble, thus forming a two-phase system. This allows for continued regeneration of urea and simple procedures for product isolation. The process allows, i.a., for separation of

eicosapentaenoic acid and docosahexenoic acid from fish oil fatty acids Et esters.
IT 57-13-6, Urea, biological studies
(separation of lipophilic compds. by complexing with)
RN 57-13-6 HCAPLUS
CN Urea (CA INDEX NAME)

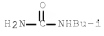
IC ICM C07C051-42
ICS C07C051-43; C07C051-47; C07C067-48; C07C067-52; C07C067-56; C11C001-00; C11C001-02
CC 17-9 (Food and Feed Chemistry)
IT Fatty acids, biological studies
(fish-oil, Et esters, eicosapentaenoic acid and docosahexenoic acid from)
IT 25167-62-8P, Docosahexaenoic acid
(separation from fish oil fatty acids Et esters by complexing with urea)
IT 10417-94-4P, Eicosapentaenoic acid
(separation from fish oil fatty acids by Et esters complexing with urea)
IT 57-13-6, Urea, biological studies
(separation of lipophilic compds. by complexing with)

L44 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:562443 HCAPLUS Full-text
DOCUMENT NUMBER: 93:162443
ORIGINAL REFERENCE NO.: 93:25805a,25808a
TITLE: Occurrence, formation, and precursors of N-nitroso compounds in Japanese diet
AUTHOR(S): Kawabata, Toshiharu; Ohshima, Hiroshi; Uibu, Jaak; Nakamura, Masamichi; Matsui, Masami; Hamano, Miyoko
CORPORATE SOURCE: Dep. Biomed. Res. Foods, NIH, Tokyo, Japan
SOURCE: Proceedings of the International Symposium of the Princess Takamatsu Cancer Research Fund (1979), 9th(Nat. Occurring Carcinog.-Mutagens Modulators Carcinog.), 195-209
CODEN: PPTCBY
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984
AB Data on the nitrosamine content of various fermented foods indicate that a range from almost no detectable level to trace quantities of nitrosamines nitrosodimethylamine [62-75-9], and nitrosopyrrolidine [930-55-2] could be detected in various fermented sauce, vinegar, miso, sake, beer, etc. The nitrosamine content of salt-dried fish and shellfish increased when these products were broiled in a gas range. This was very conspicuous in the case of dried squid, with the highest instance being 313 μg/kg. Covering dried fish with Al foil or broiling in an elec. range was highly effective in decreasing the degree of nitrosamine formation. No alkylureas were detected in salt-dried fish products, including the original uncooked products and those broiled in a gas range. Green tea exts. enhanced the nitrosation of secondary amines Me2NH [124-40-3], Et2NH [109-89-7], pyrrolidine [123-75-1],

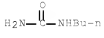
piperidine [110-89-4] at specific pH (3.0 or 3.4) and tea extract concentration Among various polyphenols in green tea, only catechins catalyzed nitrosamine formation, whereas pyrocatechol [120-80-9], pyrogallol [87-66-1], and gallic acid [149-91-7] inhibited the reaction. Flavonols or flavones in tea had no effect on the nitrosation reaction.

IT 592-17-6 592-31-4 598-50-5
625-52-5 627-06-5 628-49-9
691-60-1 38869-91-9
(in salt-dried fish, of Japanese diet, nitrosamine formation and carcinogenicity in relation to)

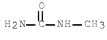
RN 592-17-6 HCAPLUS
CN Urea, N-(2-methylpropyl)- (CA INDEX NAME)



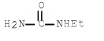
RN 592-31-4 HCAPLUS
CN Urea, N-butyl- (CA INDEX NAME)



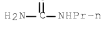
RN 598-50-5 HCAPLUS
CN Urea, N-methyl- (CA INDEX NAME)



RN 625-52-5 HCAPLUS
CN Urea, N-ethyl- (CA INDEX NAME)

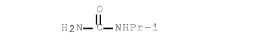


RN 627-06-5 HCAPLUS
CN Urea, N-propyl- (CA INDEX NAME)

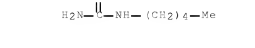


RN 628-49-9 HCAPLUS
CN Urea, N-(3-methylbutyl)- (CA INDEX NAME)

RN 691-60-1 HCAPLUS
CN Urea, N-(1-methylethyl)- (CA INDEX NAME)



RN 38869-91-9 HCAPLUS
CN Urea, N-pentyl- (CA INDEX NAME)



CC 4-7 (Toxicology)
Section cross-reference(s): 17
IT Fish
Shellfish
(in Japanese diet, nitroso compds. in, carcinogenicity in relation to)
IT 592-17-6 592-31-4 598-50-5
625-52-5 627-06-5 628-49-9
691-60-1 38869-91-9
(in salt-dried fish, of Japanese diet, nitrosamine formation and carcinogenicity in relation to)

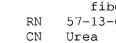
L44 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:469312 HCAPLUS Full-text
DOCUMENT NUMBER: 93:69312
ORIGINAL REFERENCE NO.: 93:11291a,11294a
TITLE: Production of volatile fatty acids and pH values in alimentary tract of Fayoumi cock with reference to the nutritive values of the investigated rations
AUTHOR(S): Shahta, Osman; Abdel-Rahman, M. M.
CORPORATE SOURCE: Monoufia Univ., Cairo, Egypt
SOURCE: Indian Journal of Animal Sciences (1980), 50(3), 256-60
CODEN: IJLAA4; ISSN: 0367-8318
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 12 May 1984

AB The effect of feeding high- and low-fiber rations, with and without nonprotein N (NPN) and animal protein, on Fayoumi cocks was studied to estimate the nutritive values of the investigated ratios and also to determine the growth and production of total volatile fatty acids and pH values in the alimentary tract. The digestibility of nutrients in the low-fiber rations was much higher than that of high-fiber rations. Supplementation of high-fiber ration with fish meal, silkworm chrysalis, urea [57-13-6], or NH4NO3 increased both crude fiber and protein digestibilities and N balance. VFAs were lower in both gizzard and intestine of birds fed low-fiber rations. The highest amount of VFA was obtained in cecum followed by that in crop, as seen on low-fiber rations. The pH value was not affected by differences in the fiber protein/NPN levels of the ration but it was always lower in gizzard and crop (4.3 to 5.0) than in cecum and intestine (5.3-6.5). The N retention was the highest in low-fiber rations except for that of plant protein, which was the lowest (57.90%).

IT 57-13-6, biological studies
(feed digestibility by chickens in relation to dietary, dietary fiber effect on)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)



CC 18-3 (Animal Nutrition)

IT Fish
(meal, feed digestibility by chickens in relation to dietary, dietary fiber effect on)

IT 57-13-6, biological studies 6484-52-2, biological studies
(feed digestibility by chickens in relation to dietary, dietary fiber effect on)

L44 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:88048 HCAPLUS Full-text

DOCUMENT NUMBER: 86:88048

ORIGINAL REFERENCE NO.: 86:13905a,13908a

TITLE: A note on the use of different levels of forage and sodium bentonite on the performance of calves fed high levels of molasses/urea

AUTHOR(S): Losada, H.; Santos, A.; Elías, A.

CORPORATE SOURCE: Inst. Cienc. Anim., Havana, Cuba

SOURCE: Cuban Journal of Agricultural Science (1976), 10(1), 29-33
CODEN: CJASB6; ISSN: 0864-0408

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 12 May 1984

AB Calves grew faster and more efficiently when fed 4.5 kg roughage/100 kg live weight with free access to 2% urea [57-13-6] in molasses (also containing fish meal and minerals) from 14 to 180 kg live weight then feeding 1.5 kg/100 kg live weight than when fed 1.5 kg roughage/100 kg throughout the 4-month expt1. period. Addition of up to 4% Na bentonite to the molasses stimulated addnl. growth, presumably by affecting rumen toxicity.

IT 57-13-6, biological studies
(feeding experiment with, on calves)

RN 57-13-6 HCAPLUS

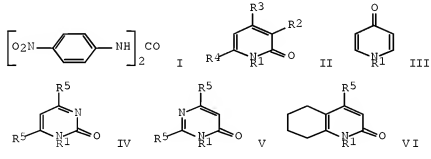
CN Urea (CA INDEX NAME)

CC 18-13 (Animal Nutrition)
IT 57-13-6, biological studies
(feeding experiment with, on calves)

L44 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1976:468291 HCAPLUS Full-text
DOCUMENT NUMBER: 85:68291
ORIGINAL REFERENCE NO.: 85:10939a,10942a
TITLE: Anticoccidial complexes of 4,4'-dinitrocarbanilides
INVENTOR(S): Rogers, Edward F.; Dybas, Richard A.; Hannah, John
PATENT ASSIGNEE(S): Merck and Co., Inc., USA
SOURCE: U.S., 7 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3957997	A	19760518	US 1974-509380 <--	19740926
PRIORITY APPLN. INFO.:			US 1970-316180 <--	A2 19701218

ED Entered STN: 12 May 1984
GI



AB Compns. for the prevention and cure of coccidiosis comprise an inert carrier and 1 or more complexes of 4,4'-dinitrocarbanilide (I) with 2-pyridones (II), 4-pyridones (III), 2-pyrimidinones (IV), 4-pyrimidinones (V) or tetrahydroquinolones (VI). Thus to 41.7 g 1-methyl-3-methoxy-2(1H)pyridone (VII) [54955-13-4] in MeOH-PhMe was added 72 g I to form a thick beige solid. The slurry was stirred overnight at room temperature, filtered, washed with

hexane and dried to give I-VII complex [59896-33-2]. Animal feed supplements were prepared containing the I complexes.

IT 625-52-5
(reaction of, with acetylacetone)

RN 625-52-5 HCAPLUS

CN Urea, N-ethyl- (CA INDEX NAME)

IC A61K031-44

INCL 424263000

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 27, 28

IT 625-52-5
(reaction of, with acetylacetone)

L44 ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1970:465101 HCAPLUS Full-text

DOCUMENT NUMBER: 73:65101

ORIGINAL REFERENCE NO.: 73:10663a,10666a

TITLE: Research on processes for making shark meat edible

AUTHOR(S): Tishin, V. E.

CORPORATE SOURCE: USSR

SOURCE: Rybnoe Khozyaistvo (Moscow, Russian Federation) (1970), 46(1), 58-61
CODEN: RYKHAK; ISSN: 0131-6184

DOCUMENT TYPE: Journal

LANGUAGE: Russian

ED Entered STN: 12 May 1984

AB The nonprotein N content of shark meat is 1600 mg % compared to 300-400 mg % in other fish. The greatest part of this N, up to 1100 mg %, is made up by urea N. In some cases, the urea N content is up to 2300 mg %. The urea N causes a specific odor and a bitter-sour flavor in shark meat. Shark meat contains all essential amino acids. When the meat is treated with a solution of NaHCO3 or with a 2% solution of Na2CO3, a good-flavored edible product is obtained. Residual urea that remains after this treatment can be treated with urease obtained from soybean flour. The quantity of urea and volatile bases was decreased 20-30 times.

IT 57-13-6, biological studies
(of shark tissue, edibility in relation to)

RN 57-13-6 HCAPLUS

CN Urea (CA INDEX NAME)

CC 17 (Foods)

ST shark meat processing food; urea shark meat food; fish shark meat urea food

IT 57-13-6, biological studies 7727-37-9, biological studies
(of shark tissue, edibility in relation to)

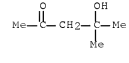
L44 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1953:3384 HCAPLUS
DOCUMENT NUMBER: 47:3384
ORIGINAL REFERENCE NO.: 47:601d-f
TITLE: Urea derivatives as additives for animal feed
INVENTOR(S): Harvey, Mortimer T.
PATENT ASSIGNEE(S): Harvel Research Corp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2592565		19520415	US 1951-213479 <--	19510215

ED Entered STN: 22 Apr 2001
GI For diagram(s), see printed CA Issue.
AB White crystalline reaction products of urea and Me2CO, AcCH2C(OH)Me2, or mesityl oxide are added in the proportion of 1-10%, either directly or dispersed in an edible oil, to feeds for cattle, sheep, foxes, minks, skunks, and poultry. These compds. appear to act as growth stimulants. Triacetonediurea,(I),Me2C[CH2CMe.NH.CO.NH]2 m. approx. 252°, is prepared by bubbling dry HCl gas 56 over a period of 30 min. into urea 240 and Me2CO 360 g. held at 40°, stirring the mixture 15 min., allowing it to stand 3-72 hrs., pouring it into an equal volume of water neutralizing with aqueous NaOH, allowing the product to crystallize, and recrystg. it from hot water. Diacetone monourea (II), m. 279-280°, having the structure Me2C.CH2.CMe:N.CO.NH is prepared by substituting 540 g. AcCH2C(OH)Me2 for the Me2CO; crystallization from hot 1:1 EtOH-H2O yields 350 g. A compound, m. 290-1°, apparently isomeric with II, is obtained (250 g.) by substituting 540 g. mesityl oxide for the AcCH2C(OH)Me2.
IT 855377-25-2, 2-Pentanone, 4-hydroxy-4-methyl-, compound with urea
(as additive for animal feed)
RN 855377-25-2 HCAPLUS
CN 2-Pentanone, 4-hydroxy-4-methyl-, compd. with urea (5CI) (CA INDEX NAME)

CM 1

CRN 123-42-2
CMF C6 H12 O2



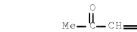
CM 2

CRN 57-13-6
CMF C H4 N2 O

IT 856189-89-4, Mesityl oxide, compound with urea
(for feed)
RN 856189-89-4 HCAPLUS
CN Mesityl oxide, compd. with urea (5CI) (CA INDEX NAME)

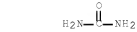
CM 1

CRN 141-79-7
CMF C6 H10 O



CM 2

CRN 57-13-6
CMF C H4 N2 O



CC 10 (Organic Chemistry)
IT Acetone, compound with urea
(as additive for animal feed)
IT 855377-25-2, 2-Pentanone, 4-hydroxy-4-methyl-, compound with urea
(as additive for animal feed)
IT 57-13-6, Urea
(derivs., as additives for animal feed)
IT 856189-89-4, Mesityl oxide, compound with urea
(for feed)

```
=> d his nofile

     (FILE 'HOME' ENTERED AT 09:17:40 ON 20 MAR 2008)

     FILE 'HCAPLUS' ENTERED AT 09:17:49 ON 20 MAR 2008
L1             1 SEA ABB=ON  PLU=ON  US20050095314/PN
                 SEL RN

     FILE 'REGISTRY' ENTERED AT 09:18:04 ON 20 MAR 2008
L2             1 SEA ABB=ON  PLU=ON  57-13-6/BI
L3               STR
L4            50 SEA SSS SAM L3
                 DIS SIA L3
L5               STR L3
L6            50 SEA SSS SAM L5
L7               STR L5
L8             2 SEA SSS SAM L7
L9               SCR 2043
L10           17 SEA SSS SAM L7 AND L9
L11            2 SEA SSS SAM L7 NOT L9
L12              SCR 2043 OR 1918 OR 1995 OR 2016 OR 2021 OR 2026
L13            2 SEA SSS SAM L7 NOT L12
L14              SCR 1838
L15           29 SEA SSS SAM L7 NOT (L12 OR L14)
L16         2207 SEA SSS FUL L7 NOT (L12 OR L14)
L17            1 SEA ABB=ON  PLU=ON  L16 AND L2
                 SAV L16 DEE143/A

     FILE 'HCAPLUS' ENTERED AT 10:00:00 ON 20 MAR 2008
L18        95805 SEA ABB=ON  PLU=ON  L16
L19            1 SEA ABB=ON  PLU=ON  L1 AND L18
L20         3281 SEA ABB=ON  PLU=ON  L18 AND FOOD?/SC,SX
L21          196 SEA ABB=ON  PLU=ON  L20 AND FISH?
L22          653 SEA ABB=ON  PLU=ON  L18(L)FFD/RL
L23           12 SEA ABB=ON  PLU=ON  L22(L)FISH?
L24           41 SEA ABB=ON  PLU=ON  L22 AND FISH?
L25           39 SEA ABB=ON  PLU=ON  L18(L)(FEED? OR DIET? OR FOOD?)(3A)(FIS
                 H? OR  (MARINE? OR AQUATIC OR OCEAN?)(2A) SPECIES OR
                 CRUSTACEAN?)
L26           75 SEA ABB=ON  PLU=ON  (L23 OR L24 OR L25)
L27           49 SEA ABB=ON  PLU=ON  L26 AND FFD/RL

     FILE 'REGISTRY' ENTERED AT 10:11:11 ON 20 MAR 2008
L28            1 SEA ABB=ON  PLU=ON  57-13-6/RN
L29         2206 SEA ABB=ON  PLU=ON  L16 NOT L28

     FILE 'HCAPLUS' ENTERED AT 10:11:55 ON 20 MAR 2008
L30        89657 SEA ABB=ON  PLU=ON  L28
L31        89608 SEA ABB=ON  PLU=ON  L30 NOT L27
L32            0 SEA ABB=ON  PLU=ON  L27 NOT L30
L33         8406 SEA ABB=ON  PLU=ON  L29
L34            1 SEA ABB=ON  PLU=ON  L33 AND (FEED? OR DIET? OR FOOD?)(3A)(F
                 ISH? OR  (MARINE? OR AQUATIC OR OCEAN?)(2A) SPECIES OR
                 CRUSTACEAN?)
L35           51 SEA ABB=ON  PLU=ON  L33 AND FFD/RL
L36            1 SEA ABB=ON  PLU=ON  L35 AND FISH?
L37            0 SEA ABB=ON  PLU=ON  L35 AND L1
L38           37 SEA ABB=ON  PLU=ON  L35 AND (FEED? OR DIET? OR FOOD?)
```

L39	2	SEA ABB=ON	PLU=ON	L38 AND (WATER? SEA? OR RIVER? OR LAKE? OR OCEAN? OR MARINE? OR AQUATIC?) E FEED/CT
L40	104865	SEA ABB=ON	PLU=ON	FEED+PFT,NT/CT
L41	5	SEA ABB=ON	PLU=ON	L35 AND L40
L42	4	SEA ABB=ON	PLU=ON	L33 AND ANIMAL FEED?
L43	58	SEA ABB=ON	PLU=ON	L27 OR L34 OR L36 OR L37 OR L39 OR L41 OR L42
L44	36	SEA ABB=ON	PLU=ON	L43 AND (1840-2002)/PRY,AY,PY